

# Loyola

College OF MONTREAL

1866  
1867



*General Calendar*

Loyola  
College  
calendar



RD Wilson - 65

ARTS • SCIENCE • ENGINEERING • COMMERCE

*Ad Maiorem Dei Gloriam*



1 9 6 6 - 1 9 6 7

7141 SHERBROOKE ST. WEST  
MONTREAL, TEL. 482-0320

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# ACADEMIC CALENDAR 1966-1967

## SUMMER

1 9 6 6

### MAY

S	M	T	W	T	F	S
1	2	3	4	5	6	7
8	9	10	11	12	13	14
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29	30	31				

### JUNE

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### JULY

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31						

### AUGUST

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### SEPTEMBER

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### OCTOBER

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30	31					

### NOVEMBER

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### DECEMBER

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25	26	27	28	29	30	31

### WINTER

1 9 6 6 - 6 7

### JANUARY

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29	30	31				

### FEBRUARY

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26	27	28				

### MARCH

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19	20	21	22	23	24	25
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### APRIL

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23	24	25	26	27	28	29
30						

## academic calendar 1966-67

### Wednesday June 15

Last day for making application to enter College.

### Friday, July 1

Last day for making appeal to have an examination paper reviewed.

### Friday, July 15

Last day for returning preregistration form.

Last day for making application for supplemental examination.

Last day for making appeal to repeat year.

### Monday, August 8

Schedule for supplemental examinations will be posted.

### Monday, August 15

Supplemental examinations begin.

Last day for accepting late applications to enter College.

### Wednesday, Thursday, September 7 and 8

Placement Tests for Freshmen from the Montreal area — 9:30 a.m.

### Monday, September 12

Payment of Fees for Commerce I, Engineering I and Science I students : 9:00 a.m. to 12:00 noon.

Registration of Commerce I, Engineering I and Science I students : 1:00 to 5:00 p.m.

Freshmen Orientation : 9:30 a.m.

### Wednesday, September 14

Payment of Fees for Arts II students : 9:00 a.m. to 12:00 noon.

Registration of Arts II students : 1:00 to 5:00 p.m.

Freshmen Orientation 9:30 a.m.

### Thursday, September 15

Payment of Fees for Arts III and IV students : 9:00 to 12:00 noon..

Registration of Arts III and IV students : 1:00 to 5:00 p.m.

Freshmen Orientation : 9:30 a.m.

**Friday, September 16**

Payment of Fees for Engineering II, III and IV and Science II, III and IV students : 9:00 a.m. to 12:00 noon.

Registration of Engineering II, III and IV and Science II, III and IV students ; 1:00 to 5:00 p.m.

**Saturday, September 17**

Payment of Fees for Arts I students : 9:00 a.m. to 12 noon.

Registration of Arts I students : 1:00 p.m.

**Monday, September 19**

Lectures begin.

President's address to Upperclass Students — 11:00 a.m.

**Tuesday, September 20**

Solemn Mass for the opening of the Academic Year — 12:00 noon.

**Friday, September 30**

Last day for late registration.

**Friday, October 7**

Last day for course changes.

**Monday, October 10**

Thanksgiving Day — full holiday.

**Thursday, October 13**

Fall Convocation.

**Friday, November 11**

1:00 p.m. — Remembrance Day Services and Mass for deceased staff and students.

**Wednesday, December 14**

Last day of Freshmen lectures before Christmas vacation.

**Thursday, December 15**

Freshmen mid-year tests begin.

**Thursday, December 22**

Last day of upperclass lectures before Christmas vacation.

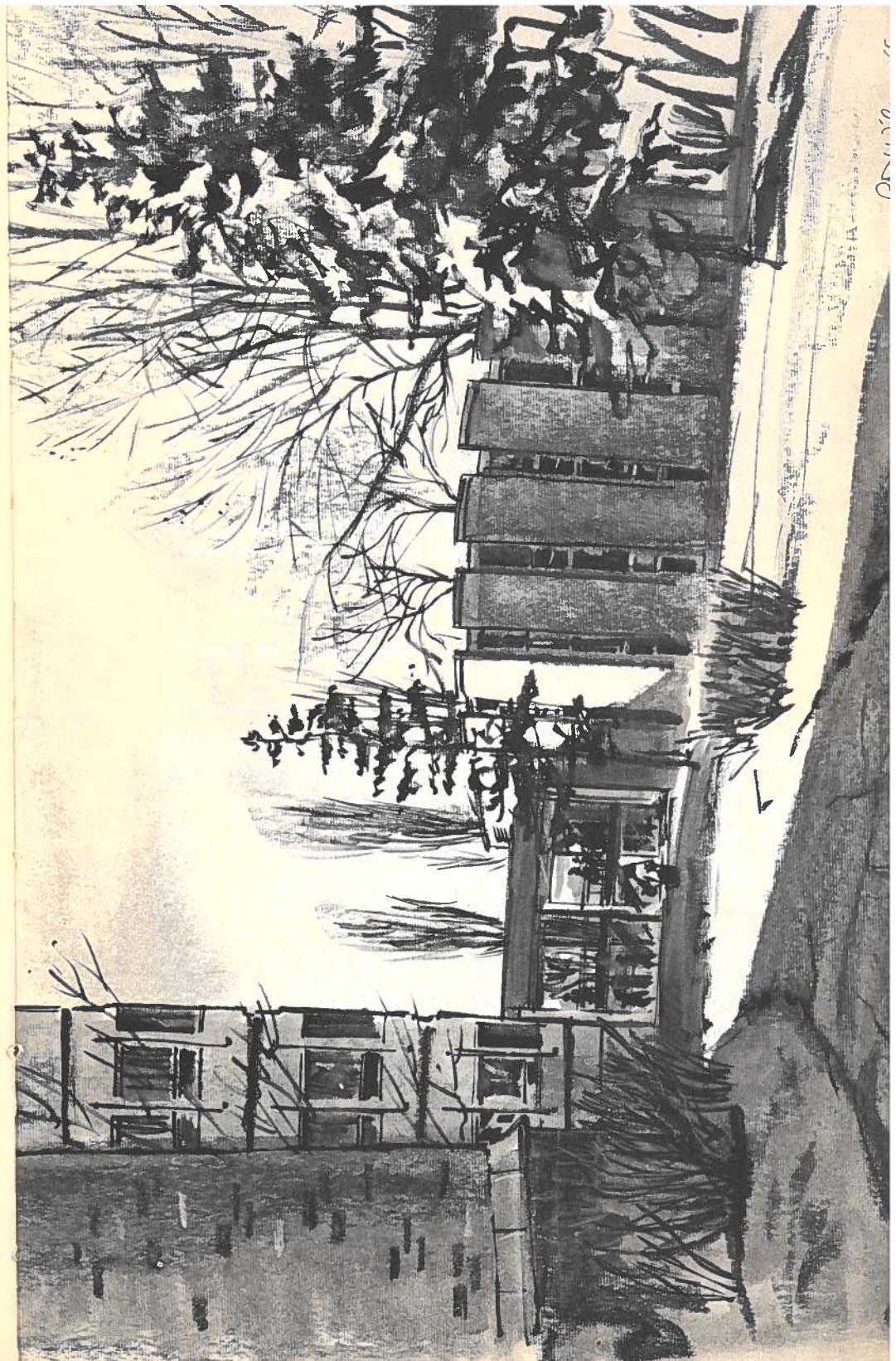
**1967**

**Tuesday, January 3**

Mid-year final examinations begin in all faculties.

**Monday, January 9**

Second term lectures begin.



**Friday, February 3**  
Father President's Holiday.

**Friday, March 10**  
Celebration of the Feast of St. Ignatius Loyola.

**Wednesday, March 22**  
Last day of lectures before Easter recess.

**Tuesday, March 28**  
Lectures resumed.  
Last day for making application for degree.

**Friday, April 7**  
Last day of lectures.

**Monday, April 10**  
Final examinations begin.

**Wednesday, May 17**  
Last day for submitting documents needed to justify appeal for aegrotat standing and special examinations.

**Saturday, May 27**  
Convocation.

### board of trustees

Very Rev. Patrick G. Malone, S.J., B.A., Ph.L., M.A.,  
S.T.L., President  
Very Rev. George E. Nunan, S.J., Ph.D., L.L.D.,  
Superior  
Rev. Cyril B. O'Keefe, S.J., B.A., M.A., S.T.L., Ph.D.  
Rev. Daniel H. McLarnon, S.J., B.A., Treasurer  
Rev. J. Aloysius Graham, S.J., B.A., M.A., S.T.L.,  
Secretary  
Rev. John S. O'Neill, S.J., B.A., B.Paed., M.Sc.  
Rev. Hugh J. MacPhee, S.J., B.A., M.A., S.T.L.  
Mr. Timothy P. Slattery, Q.C., M.B.E., Legal Adviser

### board of governors

His Excellency, General Georges P. Vanier  
Major-General F. J. Fleury, Chairman  
Very Rev. P. G. Malone, S.J., Vice-Chairman  
M. G. Ballantyne  
The Hon. P. C. Casey  
S. D. Clarke  
John H. Coleman  
F. R. Graham Jr.  
H. J. Hemens, Q.C.  
F. R. Kearns  
C. S. Malone  
F. C. McDougall  
D. J. McIlhone  
Rev. D. H. McLarnon, S.J.  
H. J. O'Connell  
Rev. C. B. O'Keefe, S.J.  
J. H. Ranahan  
S. Randaccio  
T. P. Slattery, Q.C.  
A. K. Velan  
C. H. Wayland  
W. H. Wilson  
J. M. Wynn  
J. S. Dorrance, Secretary to the Board



## **members of the senate**

### **Ex officio**

- \*Very Rev. P. G. Malone, S.J. (Chairman)
- \*G. W. Tait, S.J. (Secretary)
- \*M. L. Bessner
- \*H. Charbonneau
- \*J. A. Graham, S.J.
- \*G. W. Joly
- \*G. MacGuigan, S.J.
- \*C. B. O'Keefe, S.J.  
G. Trowsdale

### **Appointed**

- J. P. Doyle
- H. Habib
- J. E. O'Brien, S.J.

### **Elected**

#### **FACULTY OF ARTS**

- \*F. G. W. Adams
- \*M. Blanar
- R. C. Hinners
- A. Lauziere
- D. Savage
- E. O'Brien, S.J.
- R.S. Wareham

#### **FACULTY OF SCIENCE**

- C. E. Eappen
- K. Ekler
- D. E. McElcheran
- R. E. O'Connor, S.J.

#### **FACULTY OF COMMERCE**

- R. L. McGraw

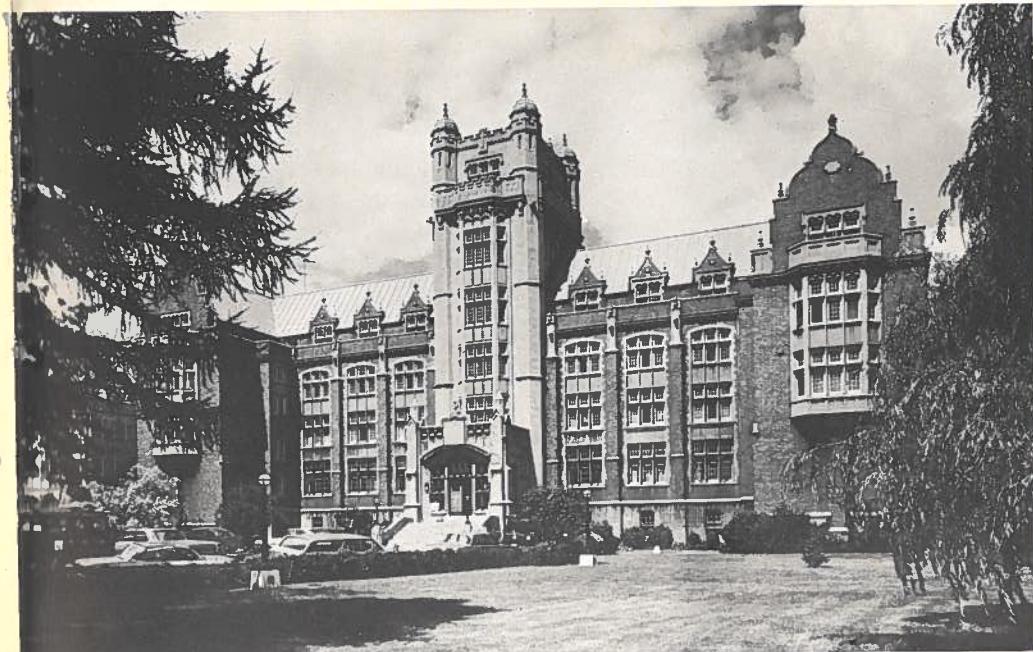
#### **FACULTY OF ENGINEERING**

- D. J. McDougall

\*Denotes member of the Executive Committee

## officers of administration

Very Rev. P. G. Malone, S.J., B.A., Ph.L., M.A., S.T.L., President  
 Rev. C. B. O'Keefe, S.J., B.A., M.A., S.T.L., Ph.D., Dean of Studies  
 Rev. G. J. MacGuigan, S.J., B.A., M.A., S.T.L., Associate Dean of Arts  
 Rev. J. A. Graham, S.J., B.A., M.A., S.T.L., Associate Dean of Science  
 M. L. Bessner, B.Comm., L.A., C.A., Director of Commerce  
 G. W. Joly, B.A., B.Eng., M.Eng., Associate Dean of Engineering  
 H. Charbonneau, M.A., L.Ph., Director of Evening Division  
 Rev. D. H. McLarnon, S.J., B.A., Treasurer  
 Rev. J. G. McDonough, S.J., B.A., M.A., Dean of Students  
 Rev. G. W. Tait, S.J., B.A., Ph.L., M.A., S.T.L., Registrar  
 Major J. P. Hale, Supervisor Guidance Centre  
 W. J. Cozens, B.A., Director of Freshmen  
 G. Trowsdale, B.A., (Lib. Sc.) Librarian  
 A. J. Ferrari, B.Comm., C.A., R.I.A., Comptroller  
 J. Stirling Dorrance, B.A., M.A., Director of Development



LOYOLA COLLEGE-ADMINISTRATION BUILDING

## administrative offices

### Registrar :

Rev. G. W. Tait, S.J., B.A., Ph.L., M.A., S.T.L., Registrar  
 T. A. Murphy, B.Comm., Associate Registrar  
 Miss E. Gibbons, Assistant Registrar (Records)  
 J. W. Noonan, B.Sc., Assistant Registrar  
 J. R. Britt, B.Comm., Assistant to the Registrar  
 B. J. McEntee, B.A., Assistant to the Registrar (Admissions)

### Finance and Business :

Rev. D. H. McLarnon, S.J., B.A., Treasurer  
 A. J. Ferrari, B.Comm., C.A., R.I.A., Comptroller  
 A. St. Amour, Bursar  
 R. J. Lennen, Director of Purchases  
 Miss I. Perreault, Accountant  
 L. Price, Director of Residence and Food Services  
 P. Gore, Manager of Bookstore  
 G. Leduc, Manager of Auditoria

**Dean of Students :**

Rev. J. G. McDonough, S.J., B.A., M.A.  
 D. F. Young, B.A., M.A., Dean of Men  
 Dean of Women  
 D. Clark, B.A., M.A., Dean of Residence  
 P. Lefebvre, Director of Financial Aid  
 E. Steynor, B.A., Student Placement Officer  
 E. F. Enos, B.Sc., B.A., Director of Physical Education  
 Major J.R. Rousseau, Loyola College, C.O.T.C.  
 Rev. J. S. O'Neill, S.J., B.A., B.Paed., M.Sc., Student Counsellor  
 G. V. Uihlein, Jr., B.Sc. M.Sc., Assistant Dean of Men  
 Major J. P. Hale, Supervisor Guidance Centre

**Director of Development :**

J. Stirling Dorrance, B.A., M.A.  
 E. Williams, B.A., B.C.L., Publications Officer

**Librarian :**

G. Trowsdale, B.A. (Lib.Sc.)  
 J. Princz, B.A., B.L.S., M.A., Deputy Librarian

**Maintenance Co-ordinator :**

Rev. R. McDougall, S.J., B.A.  
 L. Provost, Maintenance Superintendent

**New Buildings Supervisor :**

Rev. E. J. Sherry, S.J., B.A., M.A.

**Loyola College Faculty Association**

D. J. O'Brien, President  
 C. E. Eappen, Vice President  
 J. T. Rooney, Secretary  
 W. J. Carroll, Treasurer



STAIRCASE, GEORGES P. VANIER LIBRARY

## faculty list — 1966-67

ADAMS, F.G.W., B.A. (Toronto), M.A. (Toronto), Ph.D. (Chicago), Associate Professor and Chairman, Department of History.

ALLAIRE, G.W., B.A. (Montreal), M.A. (Connecticut), Ph.D. (Boston), Assistant Professor and Director of Music.

ALVI, S., B.A. (Karachi), M.A. (Karachi), Ph.D. (Colorado), Assistant Professor, Department of Economics.

ANDERSEN, G.W., B.A. (Horsens Stateskole, Denmark), B.Ed. (Denmark), M.A. (Montreal), Assistant Professor, Department of French Studies.

ANDERSEN, Mrs. M., Certificat d'Etudes Littéraires (Paris), Diplôme d'Etudes Supérieures (Free University of West Berlin), Ph.D. (Montreal), Assistant Professor, Department of French Studies.

BAGCHI, S.N., B.Sc., (Calcutta), M.Sc. (Calcutta), D.Sc. (Calcutta), Professor, Department of Physics.

BARBERIS, R., B.A. (Montreal), S.T.L. (Montreal), Lecturer, Department of Theology.

BARTHO, A., Diplômé Ecole Normale Supérieure de Saint-Cloud, Sessional Lecturer, Department of French Studies.

BASHCONJI, G., B.Sc. (University of London), Instructor, Department of Mathematics.

BEDARD, W., O.F.M., B.A. (Montreal), S.T.D. Catholic University of America). Assistant Professor, Department of Theology.

BENJAMIN, I., B.Sc. (Rostov), D.Sc. (Prague), Associate Professor, Department of Mathematics.

BERNS, T., B.A. (St. Mary of the Lake), Instructor, Department of English.

BESSNER, I.M., B. Comm. (McGill), I.A. (McGill), C.A., Associate Professor and Director of Commerce.

BLANAR, M., B.A. (Montreal), B.Paed. (Montreal), M.A. (Montreal), Ph.D. (Montreal), Associate Professor Department of English.

BONYUN, D.A., B.A. (Bishops), M.A. (McGill), Assistant Professor Department of Mathematics, Director of Computer Centre.

BROWN, D., A.B. (Xavier University, Cincinnati), Assistant Professor, Department of Classics.

BROWNE, W.J., S.J., B.A. (Montreal), S.T.L. (Regis), S.T.D. (Gregorian), Assistant Professor, Department of Theology.

BUELL, J., B.A. (Montreal), M.A. (Montreal), Ph.D. (Montreal), Associate Professor, Department of Communication Arts.

CARROLL, W.J., B.A. (New Mexico), M.A. (Indiana), Assistant Professor, Department of Economics.

CATRY, Miss M., Certificat d'Etudes Littéraire (Lille), Certificat de Pédagogie (Lille), M.A. (Mount Holyoke), Lecturer, Department of French Studies.

CHOWN, E.H., B.Sc., (Queen's), M.A.Sc. (British Columbia), Ph.D. (John Hopkins), Assistant Professor, Department of Geotechnical Science.

CLARK, D.R., B.A. (St. Joseph's College, Collegeville), M.A. (Fordham), Sessional Lecturer, Department of Philosophy and Communication Arts.

COLLINS, J., B.A. (Duquesne), Lecturer, Department of Theology.

COOLIDGE, R.T., B.A. (Harvard), M.A. (Berkeley), B. Litt. (Oxford), Assistant Professor, Department of History.

COPP, J.T., B.A. (S.G.W.), M.A. (McGill), Assistant Professor, Department of History.

COSTA, J., B.Sc (Collegio Vescovile, Italy), M.A. (Seton Hall), Lecturer, Department of Modern Languages.

COYTE, R.C., B.A. (Oxford), Diploma in Political Science and Economics (Oxford), Assistant Professor, Department of Political Science.

CRONIN, R.T., S.J., B.A. (Montreal), M.Sc. (Fordham), Ph. D. (Fordham), Assistant Professor, Department of Biology.

DAUVERGNE, J., B.B.A. (Missouri), M.A. (Fletcher School of Law), M.A.L.D. (Fletcher). Assistant Professor, Department of Economics.

DECHENE, A.C., B.A. (Notre Dame), M.A. (Catholic U. of America), Lecturer, Department of Theology.

DeTAKACSY, N.G., B.Sc. (Montreal), M.Sc. (McGill), Ph.D. (McGill), Assistant Professor Department of Physics (on leave of absence).

DHINDSA, K.S., B.Sc. (Panjab), M.Sc. (Panjab), Sessional Lecturer, Department of Biology.

DOUGHTY, M., B.Sc. (London), Ph.D. (London), Assistant Professor, Department of Chemistry.

DOYLE, J.P., B.A. (Montreal), B. Paed. (Montreal), M.A. (Montreal), Assistant Professor and Chairman, Department of Philosophy.

DRUMMOND, S., S.J., B.A. (Montreal), M.A. (Toronto), S.T.L., Ph.D. (Toronto), Professor and Chairman, Department of Biology.

EAPPEN, C.E., B.Sc. (Travancore), M.Sc. (Bombay), Ph. D. (McGill), Associate Professor and Acting-Chairman, Department of Physics.

EKLER, K., B.Sc. (McGill), Ph. D. (McGill), Associate Professor, Department of Chemistry.

ELTZ, H., B.A. (Feldkirch), Dr. Juris (Innsbruck), Sessional Lecturer, Department of French Studies.

FAHEY, B.J., B.A. (Montreal), B.Ed. (Jacques Cartier Normal School), Ph.D. (Montreal), Sessional Lecturer, Dept. of Classics.

FAINSILBER, H., B.Sc. (S.G.W.), Lecturer, Department of Mathematics.

FOGARTY, D., S.J., B.A. (Montreal), M.A. (Columbia), Ph.D. (Columbia), Associate Professor, Department of Communication Arts.

GARNET, P., B.A., (Sheffield), M.A. (Sheffield), Lecturer, Department of Theology.

GERVAIS, M., S.J., B.A. (Montreal), L.Ph. (Immaculate Conception), M.F.A. (Catholic U. of America), M.A. (St. Mary's). On leave of absence from the Department of Communication Arts.

GOLDMAN, C., B.Eng. (McGill), M. Eng. (McGill), Associate Professor, Department of Engineering.

GRAHAM, A., S.J., B.A. (Montreal), M.A. (Toronto), S.T.L. (Gregorian), Associate Professor and Chairman, Department of Chemistry, Associate Dean of Science.

HABIB, H.P., B.A. (American University of Beirut), M.A. (Fordham), Ph.D. (McGill), Associate Professor and Chairman, Department of Political Science.

HANRAHAN, J.R., B.Comm. (St. Mary's), M.B.A. (Harvard), Assistant Professor, Accounting Department.

HAYES, F.J., B.Sc. (London), Ph.D. (McGill), Associate Professor, and Chairman), Department of Economics.

HENKEY, Rev. C., B.C.L. (Gregorian), S.T.D. (Gregorian), Ph.D. (Gregorian), Associate Professor and Chairman, Department of Theology.

HEWSON, C.G., B.A. (McGill), Lecturer, Department of Mathematics.

HINNERS, R.C., B.A. (Harvard), M.A. (Toronto), Ph.D. (Toronto), Associate Professor, Department of Philosophy.

HOEY, T., S.J., B.A. (Montreal), M.A. (Toronto), S.T.L. (Regis), Ph.D. (Harvard), Associate Professor, Department of Classics.

HOOPER, A.G., B.A. (Leeds), M.A. (Leeds), Ph.D. (Leeds), Professor, Chairman of the Department of English.

JENKINS, J., B.Sc. (McGill), M.Sc. (McGill), Assistant Professor, Department of Geotechnical Science.

JOLY, G.W., B.A. (Montreal), B.Eng. (McGill), M. Eng. (McGill), Professor and Chairman Department of Engineering, Associate Dean of Engineering.

KANE, J.J., A.B. (St. Joseph's College), M.A. (Temple), Ph.D. (Pennsylvania), Visiting Professor, Department of Sociology.

KAWAJA, P., B.Comm. (McGill), M.B.A. (Columbia), Assistant Professor, Department of Accounting.

KAWCZAK, A.S., L.L.M., M.A. (Cracow), Ph.D. (Warsaw), Associate Professor, Department of Philosophy.

KOVACS, R.L., Diploma Maths-Physics (Budapest), M.Sc. (McGill), Ph.D. (McGill), Assistant Professor, Department of Physics.

KRAKOW, K.I., B.Eng. (McGill), M.Sc. (California Institute of Technology), Associate Professor, Department of Engineering.

KUBINA, S., B.Eng. (McGill), M.Eng. (McGill), Associate Professor, Department of Engineering.

KURTH, MISS S., B.A. (McGill), Instructor Dept. of English.

LABBE, G., B.Ed. (Montreal), B.A. (Montreal), L. ès L. (Montreal), D.U.P. (Lettres), (Paris), Professor, Department of French Studies.

LALLIER, A., B.A. (McGill), M.A. (Columbia), Assistant Professor, Department of Economics.

LAU, H.H., Diplôme d'Etudes Supérieures de Philosophie (Saulchoir), M.A. (Montreal), Assistant Professor, Department of Philosophy.

LAUZIERE, A.E., B.A. (Ottawa), M.A. (Montreal), D.U.P. (Lettres), (Paris), Professor, Chairman of the Department of French Studies, Acting-Chairman, Department of Modern Languages.

LAVERY, J.J., B.A. (Manitoba), M.A. (Montreal), Ph.D. (Montreal), Associate Professor, Department of Psychology.

LEDUC, Mrs. P., B.A. (Sherbrooke), B. Ped. (Sherbrooke), M.A. (Montreal), D.U.P. (Lettres), (Paris), Assistant Professor, Department of French Studies.

LEFEBVRE, E., B.A. (Montreal), Instructor, Dept. of English.

LEMPKOWSKI, J.E., B.A. (Chicago), M.A. (Chicago), Assistant Professor and Acting-Chairman, Department of Classics.

LEVY, D., C.E.G., (Paris), L. ès. L. (Bordeaux), Lecturer, Department of French Studies.

MacDONALD, D.F., B.Comm. (S.G.W.) C.A. Assistant Professor, Accounting Department.

MacFARLANE, Miss M., B.Sc. (McGill), M.Sc., (McGill), Lecturer, Department of Geotechnical Science.

MacGUIGAN, G., S.J., B.A. (Montreal), M.A. (Toronto), S.T.L., Associate Professor, Department of English and Associate Dean of Arts.

MacLEAN, Miss J., B.A. (McGill), Instructor, Department of English.

MacPHEE, E.A., B.A., (St. Dunstan's), Lecturer, Dept. of Physics.

MacPHEE, H., S.J., B.A. (Montreal), M.A. (Toronto), S.T.L., Professor, Department of Physics.

MACKRISS, J., B.A. (Toronto), B.L.S. (McGill), M.A. (Toronto), Lecturer, Department of French Studies.

MAHEUX, M.V., B.A. (Montreal), M.A. (Catholic U. of America), Ph.D. (McGill), Associate Professor and Chairman, Department of Psychology.

MAJUMDAR, K.N., B.Sc. (Calcutta), Ph.D. (Purdue), Assistant Professor, Department of Mathematics.

MASSE, I., B.A. (Windsor), Assistant Professor, Department of Economics.

McDONOUGH, G., S.J., B.A. (Montreal), M.A. (West Baden), Sessional Lecturer, Department of Mathematics and Dean of Students.

McDOUGALL, D., B.Sc. (McGill), M.Sc. (McGill), Ph.D. (McGill), Associate Professor and Chairman, Department of Geotechnical Science (on sabbatical leave).

McELCHERAN, D., M.Sc. (McMaster), Ph.D. (Leeds), Associate Professor, Department of Chemistry.

McGOVERN, J.F., B.A. (Fordham), M.A. (Wisconsin), Assistant Professor, Department of History.

McGRAW, J.G., B.A. (Notre Dame), Ph. L. (Pontifical Institute of Philosophy, Chicago), Ph.D. (Angelicum, Rome), Assistant Professor, Department of Philosophy.

McGRAW, R.L., B.Comm. (McGill), I.A. (McGill), C.A., Assistant Professor and Chairman, Accounting Department.

McGUIRE, Miss S., A.B. (Radcliffe), B.A. (Cambridge), Instructor, Department of English.

McNAMARA, V.J., B.A. (Toronto), M.A. (Laval), Ph. D. (Laval), Associate Professor, Department of Philosophy.

MINI, P.V., B.Sc. (N.Y.U.), Ph.D. (Tulane), Assistant Professor, Department of Economics.

MONET, J., S.J., B.A. (Montreal), M.A. (Toronto), Ph.D. (Toronto), Sessional Lecturer, Department of History.

MONGENOT, G., Diplôme Ecole Normale Supérieure de St-Cloud, Sessional Lecturer, Department of French Studies.

MOORE, C., B.Sc. (Nottingham), M.Sc. (London), Lecturer, Department of Mathematics.

MORGAN, J.D., B.A. (Loyola, Los Angeles), M.A. (Southern California), Ph.D. (Southern California), Assistant Professor, Department of Philosophy.

MURPHY, A.L., B.A. (St. Mary's Halifax), M.A. (Dalhousie), Lecturer, Department of French Studies.

NEILSON, S.A., BSc. (McGill), Sessional Lecturer, Department of Engineering.

NELSON, A., S.J., B.A. (Montreal), S.T.L. (West Baden), M.A. (McGill), Associate Professor, Department of French Studies.

NEWELL, A., B.A. (Pittsburgh), M.A. (Pittsburgh), Assistant Professor, Department of English.

NOGRADY, T., M.Sc. (Budapest), Ph.D. (Budapest), Associate Professor, Department of Chemistry.

O'BRIEN, D., B.A. (Notre Dame), Ph.D. (Rochester), Assistant Professor, Department of History.

O'BRIEN, E., S.J., B.A. (Montreal), Ph.L. (Regis, Toronto), S.T.L. (Montreal), S.T.D. (Louvain), Professor, Department of Theology, Director Contemporary Theology Institute.

O'BRIEN, G., S.J., B.A. (Montreal), M.A. (St. Mary's, Halifax), S.T.L. (Regis, Toronto), S.T.D. (Woodstock), Assistant Professor, Department of Theology.

O'BRIEN, J.E., S.J., B.A. (Montreal), S.T.B. (St. Mary's), S.T.L. (Regis), Ph.D. (Southern California), Assistant Professor and Chairman, Department of Communication Arts.

O'CONNOR, B.T., B.A. (Montreal), Instructor, Dept. of English.

O'CONNOR, R.E., S.J., B.A. (St. Mary's), M.A. (Toronto), S.T.L., Ph.D. (Harvard), Professor, Department of Mathematics.

O'KEEFE, C.B., S.J., B.A. (Montreal), M.A. (Toronto), S.T.L., Ph.D. (Toronto), Associate Professor of History and Dean of Studies.

ORR, J.E., M.Sc. (Berkeley), Lecturer, Department of Engineering.

OTTOLENGHI, Mrs. E., Certificat d'Etudes Françaises (Grenoble), Certificat de Cours de Professeurs de l'Ecole Pratique de l'Alliance Française (Paris), M.A. (Middlebury), Lecturer, Department of Modern Languages.

PAVITT, Mrs. M., B.A. (American University of Cairo), Lecturer, Department of French Studies.

PARK, Miss D., B.A. (College of William and Mary), M.A. (McGill), Assistant Professor, Department of Philosophy.

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PORTER, D., B.A. (Oberlin College), Assistant Professor, Department of Political Science.

PREVOST, E.J., B.A. (Montreal), M.B.A. (Western Ontario), C.A. A.P. (Montreal), Sessional Lecturer, Accounting Department.

PRILLO, A., B.Sc. (Montreal), M.A. (Toronto), Associate Professor and Acting-Chairman, Department of Mathematics.

RAFF, A., B.A. (McGill), M.A. (McGill), Assistant Professor, Department of English.

RASPA, A., B.A. (Montreal), B. Ed. (Montreal), M.A. (McGill), Assistant Professor, Department of English.

REIDY, M., A.B. (Boston College), M.A. (Toronto), Assistant Professor, Department of Philosophy.

RIGAULT, Mrs. O., B. ès L. (Rennes), Diplôme de Professeurs de Français à l'Etranger (Sorbonne), Lecturer, Department of French Studies.

RIOUX, E., B.A. (Laval), M.A. (Montreal), L. Ph. (Immaculée Conception, Montreal), Lecturer, Department of French Studies.

RIPSTEIN, H.B., B.Comm. (S.G.W.), M.B.A. (Queen's), C.A., Assistant Professor, Accounting Department.

ROCHEFORT, J.G., B.A. (Laval), B.Sc. (McGill), M.Sc. (McGill), Ph.D. (McGill), Sessional Lecturer, Department of Biology.

ROONEY, J.T., A.B. (St. Peter's College, Jersey City), M.A. (Harvard), Assistant Professor, Department of English.

ROUBEN, C., B.A. (S.G.W.), L. ès Sc. (Paris); M.A. (McGill), Assistant Professor, Department of French Studies.

RUIGH, R.E., B.A. (Iowa), M.A. (Iowa), Ph.D. (Harvard), Assistant Professor, Department of History.

RUSSELL, S., A.B. (Queen's College), M.A. (Harvard), Ph.D. (Harvard), Associate Professor, Department of English.

SAINT PIERRE, L., B.C.L. (McGill), Lecturer in Commercial Law.

SALMON, Miss P., B.A. (S.G.W.), Instructor, Department of English.

SANTHANAM, S., M.A. (Madras), M.Sc. (Queen's), Ph.D. (Queen's), Assistant Professor, Department of Physics.

SAUTER, U., D.E.S. (Tubingen), Ph.D. (Tubingen), Assistant Professor, Department of Modern Languages.

SAVAGE, D., B.A. (McGill), Ph.D. (London), Associate Professor, Department of History.

SAWYER, F.G., B.A. (Montreal), Lecturer, Department of Theology.

SCHLACKS, C.H., B.A. (Detroit), M.A. (Michigan), Assistant Professor, Department of History.

SHIN, J., B.S. (Swarthmore College Pennsylvania), M.Sc. (Cornell), Lecturer, Department of Physics.

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SIMS, Mrs. M.J., B.A. (McGill), Instructor, Department of English.

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TRUCHON, N., B.A. (Laval), M.A. (McGill), Lecturer, Department of French Studies.

UIHLEIN, G.J., B.Sc. (Worcester Polytechnical Institute), M.Sc. (Worcester Polytechnical Institute), Sessional Lecturer, Dept. of Chemistry and Assistant Dean of Men.

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WARDY, Mrs. B., B.A. (McGill), Lecturer, Department of Classics.

WAREHAM, R., B.A. (R.M.C.), M.A. (Michigan), Assistant Professor, Department of English.

WATERS, Mrs. K., B.A. (McGill), M.A. (Oxford), Assistant Professor, Department of English.

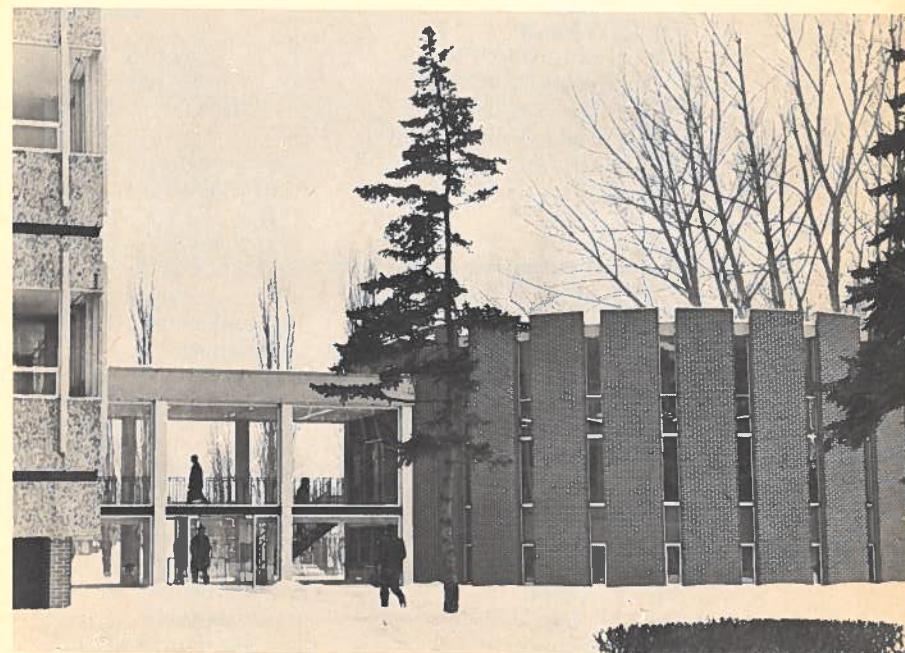
WEBSTER, A.J., B.A. (St. Thomas College, Denver), M.A. (St. Thomas College), Assistant Professor, Department of Theology.

WHITEHALL, E.C., C.A., Sessional Lecturer in Accounting.

YATES, Miss D., B.A. (Dalhousie), B.Ed. (Acadia), C.E.L. (Paris), Lecturer, Department of French Studies.

YOUNG, D., B.A. (Calif. State, Los Angeles), M.A. (Calif. State, Los Angeles), Sessional Lecturer, Department of Communication Arts and Dean of Men.

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Chairman  
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ex officio

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**Residence Hall Committee :**

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Mr. D. Clark  
Rev. J. O'Brien, S.J.  
Mr. L. Price  
President of Residence Administrative Council  
One Member of Faculty  
Psychologist

Chairman

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Dean of Women  
Mr. E. Enos  
Mr. J. B. McMullan  
Mr. D. O'Brien  
Four Members of Loyola Student Senate



GEORGES P. VANIER LIBRARY

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Dr. M. Blanar  
Dr. K. Ekler  
Dr. H. Habib  
Rev. A. Nelson, S.J.  
Rev. G. W. Tait, S.J.  
Mr. E. C. Whitehall

Chairman

**Athletic Directorate :**

**Members : (Faculty representatives)**

Mr. A. Prillo  
Note : One additional member to be appointed.

**Other Faculty Appointments**

WUSC	Dr. H. Habib
CUSO	Mr. J. T. Copp
Computer	Mr. D. A. Bonyun
Faculty Councils	Under the Chairmanship of : Mr. M. L. Bessner Director of Commerce Rev. A. Graham, S.J. Assoc. Dean of Science Mr. G. W. Joly, Assoc. Dean of Engineering Rev. G. MacGuigan, S.J. Assoc. Dean of Arts.



## history of Loyola College

The origins of Loyola College may be traced to the opening of the Collège Ste-Marie in 1848, which resumed in Montreal the work of the historic Jesuit College of Quebec, opened in 1635. From its conception the classical course at the Collège began with both languages, French and English, on an equal footing. From 1888 to 1896 the classical course in English was operated as distinct from that in French, both considered separate units within one institution.

On September 2, 1896, Loyola College was opened at 2084 St. Catherine Street West, but only on February 2, 1899 was *Loyola College* incorporated by an Act of the Quebec Legislature. It had its origin in the separate course, inaugurated ten years earlier, for the English-speaking students at Collège Ste-Marie. On February 5, 1899, Laval University officially extended its Bachelor of Arts degree to Loyola students under the special privileges granted by the Holy See in its Constitution *Jamdudum*, and the first degrees were awarded by Laval in 1903. A similar arrangement was made with the University of Montreal when it was established. In consequence of these arrangements, Loyola was assured of complete autonomy and independence in the shaping of its curriculum and in the conducting of its examinations in Arts courses; degrees being granted by the University of Montreal. Loyola instituted its Faculty of Science in 1943 and

its Faculty of Commerce in 1948. All courses in the three faculties are conducted at the College, and by special arrangement the University of Montreal grants B.Sc. and B.Comm. degrees to students who have successfully completed their courses in these faculties. The curriculum and examinations of these courses, however, are under the control of the University.

Since the early days of Loyola, many changes have occurred, especially evident in the evolution of curriculum which more and more set the College in the Anglo-Canadian tradition. For instance, the eight-year course was broken up into two distinct four-year units (1919) and options were introduced (1921), confirming three distinct courses, at least in the last two years of college ; Arts (General), Arts (Pre-Medical), Arts (Pre-Science).

In 1943 other changes were initiated which transformed Loyola into the developed academic institution it is today. A distinct Faculty of Science was established, offering Honours Chemistry and Honours Physics; the first three years of Engineering were introduced in Civil, Mechanical, Mining, Chemical, and Metallurgical Engineering; major fields in Economics, English and History were established in 1953 and in Theology in 1962.

Honours Courses in Economics, English and History were initiated in 1958 and in Theology in 1963. An Extension Department, since renamed the Evening Division, and a Summer School were founded in 1957 to fill the need of those unable to pursue their studies during the day and thus provide a public service.

The academic world soon recognized the new status of Loyola : the Chemical Institute of Canada (CIC) approved the Honours Chemistry programme as fulfilling all the requirements for professional standing in its Institute; the Engineering Institute of Canada (EIC) recognized the competence of the Loyola Engineering Department; the Institute of Chartered Accountants of Quebec accepted the work done in the Commerce course, a major in Accounting, and granted the same privileges to Loyola graduates as were conferred on graduates of other older institutions; the Canadian Conference of Canadian Universities and Colleges accepted Loyola as an autonomous member. All faculties of the College have pre-

pared students for and have sent them to the graduate schools of American, British and Canadian universities, which have conferred Engineering, Master's and Doctoral degrees on them.

The growth of Loyola has made noticeable changes; for example there are now four faculties and fifteen departments; the number of lay members of the staff has increased very greatly; and, there has been a very ambitious building programme established to provide the necessary physical facilities.

The rising importance of the Extension Department and the Summer School necessitated a revaluation of the programme in the course of which the Extension Department was renamed Evening Division of Loyola College and became more closely integrated with the Day Division of the College. The Summer School has retained its basic structure, but day courses were offered for the first time during the summer of 1964. Further information about the work of these two divisions may be obtained from the Director of the Evening Division.

### **aim of Loyola College**

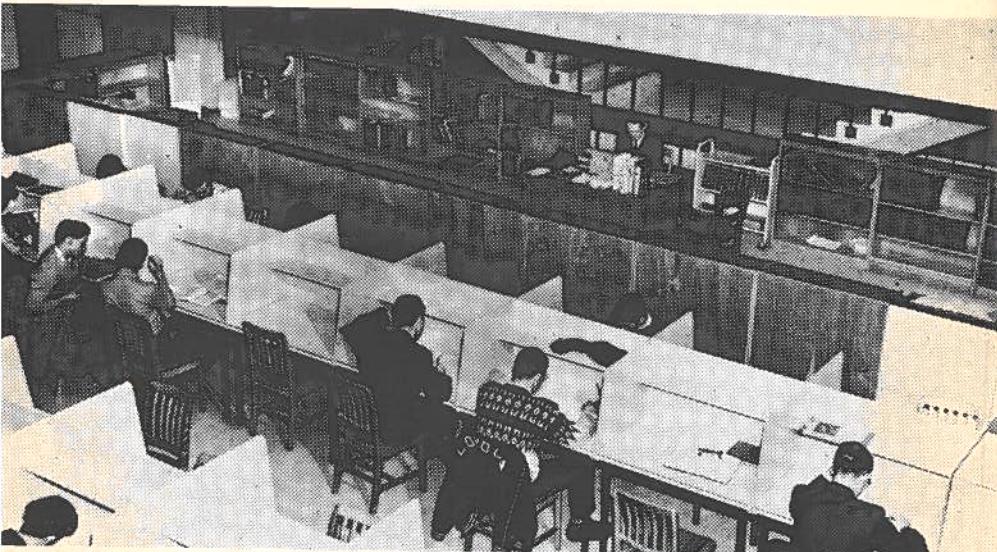
The aim and purpose of Loyola College has been stated very well by John Henry Cardinal Newman in a Sermon preached in the University Church at Dublin entitled "Intellect, the Instrument of Religious Training" in which he states :

. . . I wish the intellect to range with the utmost freedom, and religion to enjoy an equal freedom, but what I am stipulating for is, that they should be found in one and the same place. (i.e., religion and science) and exemplified in the same persons . . . wish the same spots and the same individuals to be at once oracles of philosophy and shrines of devotion.

It will not satisfy me, what satisfies so many, to have two independent systems, intellectual and religious, going at once, side by side, by a sort of division of labour, and only accidentally brought together. It will not satisfy me, if religion is here and science there, and young men converse with science all day, and lodge with religion in the evening. It is not touching the evil, to which these remarks have been directed, if young men eat, and drink and sleep in one place, and think in another; I want the same roof to contain both the intellectual and moral discipline.

Devotion is not a sort of finish given to the sciences; nor is science a sort of feather in the cap, if I may so express myself, an ornament and set-off to devotion. I want the intellectual layman to be religious, and the devout ecclesiastic to be intellectual... Sanctity has its influence; intellect has its influence; the influence of sanctity is the greater on the long run; the influence of intellect is greater at the moment. Therefore in the case of the young, whose education lasts a few years, where the intellect is, there is the influence. Their literary, their scientific teachers, really have the forming of them...

This is Loyola's reason for existence; this is Loyola's aim.



GEORGE P. VANIER LIBRARY



## facilities

**BUILDINGS** Loyola College is located on a fifty-acre site in the west end of Montreal. The structures of the College are : the Refectory Building (built in 1916); the Administration Building (1927); the Stadium and Cafeteria (1923); the Chapel and Auditorium (1933); the Central Building (1947); the Student Residence (1960); the Drummond Science Building (1962); Hingston Hall (1963); a temporary student union building (remodelled in 1963); and the Georges P. Vanier Library (1964). The new Library Building provides additional study areas and improved library facilities; and the new Student Residence accommodates 300 students. In August 1966 the Athletic Complex is scheduled to be completed.



GEORGE P. VANIER LIBRARY

**LECTURE ROOMS** The 25 lectures rooms have a total seating capacity of 1,600. The amphitheatre in the Drummond Science Building can seat 350 students; the auditorium has a seating capacity of 750..

**LABORATORIES** About 60,000 square feet of floor space is devoted to science laboratories, shops, and offices. In addition, there are five engineering laboratories, a fully-equipped language laboratory, and a computer room housing an IBM 1620 Data Processing System and associated equipment.

**MAIN CHAPEL** The College Chapel has a seating capacity of about 500.

**RESIDENCE** The new residence, Hingston Hall provides accommodation for 300 students.

**LIBRARY** The Georges P. Vanier library was opened in 1964 and provides students with one of the most modern and well-equipped libraries in Greater Montreal. The building will have an ultimate capacity of 180,000 volumes, spread over all three floors.

In the basement we have a well-equipped lecture hall with projection room and seating accomodation for 84, student lounge, faculty and staff lounges, and typing rooms.

The main floor contains the circulation desk, main reading area, card catalogue, and library offices.

The second floor contains four semiriar rooms, audio-visual room, periodicals collection, the D'Arcy McGee collection, and the African Studies collection. There are research rooms for the use of professors and students engaged upon special projects.

There is a total seating accomodation for 600 students. The Science Library is situated in the Drummond Science Building and serves the faculties of Biology, Chemistry, Engineering, Geotechnical Science, Mathematics and Physics.

The Library hours are as follows :

### VANIER LIBRARY

Monday to Friday	8:30 a.m. to 10:15 p.m.
Saturday	9:00 a.m. to 5:00 p.m.

### SCIENCE LIBRARY

Monday to Thursday	8:30 a.m. to 5:00 p.m.
	7:00 p.m. to 10:00 p.m.
Friday	8:30 a.m. to 5:00 p.m.

The libraries are closed on all legal holidays.

## income and needs of the college

The endowment of Loyola College in buildings and educational equipment is in excess of ten million dollars. The Development Plan of Loyola College calls for a Student Union, an Engineering Building, a Faculty Residence, and an Athletic Centre. The present High School Building will be replaced by a building on another site.

**THE CAPITAL DEVELOPMENT PROGRAMME**  
Continual building needs call for continuing capital development support from individuals, business and industry throughout Canada. Current construction plans include added classroom and laboratory space, residence facilities, engineering building, athletic centre and Student Union.

**THE FACULTY ENDOWMENT FUND** The need to keep pace with the growing demands for increased faculty membership of the highest qualification can be met only if an endowment fund of substantial size is available to supplement current revenue and grant funds.

**THE VANIER LIBRARY ENDOWMENT FUND**  
Contributions provide for the growth of Library holdings and facilities at Loyola commensurate with student study and research needs.

**SCHOLARSHIP AND BURSARY ENDOWMENT**  
Loyola receives continuous requests from talented and worthy students for financial aid. Both Annual and Funded scholarships and bursaries are sought to meet this need.

**THE INSURANCE ENDOWMENT FUND** A relatively small Life Insurance premium payment each year out of current Income can provide a gift to Loyola of substantial size. The death of the donor will not interrupt the completion of the gift, nor will the estate of the donor be diminished for the rest of the family.

**THE ALUMNI ANNUAL FUND** Annual giving by Alumni represents the largest single source of support to universities and colleges in North America. A regular yearly contribution to the Loyola Alumni Association supports a variety of aid programmes to Loyola College and her students. For full information and additional printed material please contact the Development Office.



GUADAGNI MEMORIAL LOUNGE

## **division of student services**

While the College gives primary emphasis to formal learning through instruction and study in an enriched curriculum, it clearly recognizes that, in the complete education of the whole person, the student has many other needs — religious, personal, athletic, social — for which it must make provision. To serve these needs the College offers a broad programme of Student Services. Within the framework of this non-instructional but nevertheless truly educational sphere of college life, the student has ready access to educational, spiritual, and vocational guidance. The Student Services programme complements the student's formal learning process by providing such educational experiences as are not ordinarily found in the laboratory and the lecture hall. Within the orbit of Student Services are included the departments of the Dean of Men, Dean of Women, Student Counsellor, Director of Athletics, Director of Financial Aid, Dean of Residence, Director of Placement Services, and Director of Student Health Services.

**SUPERVISING THE DIVISION OF STUDENT SERVICES IS THE DEAN OF STUDENTS** who, generally speaking, supervises and coordinates all those phases of student life and activity which are not instructional.

**THE DEAN OF MEN** is the prefect of discipline, responsible for proper behaviour of men students on-campus and sometimes off-campus.

**THE DEAN OF WOMEN** is responsible for proper behaviour on-campus and sometimes off-campus of women students, and she strives to assist women students whenever possible.

**THE DIRECTOR OF FINANCIAL AID** serves as the secretary of the College's scholarship committee and has available up-to-date information on all matters of financial aid. He also serves as adviser to foreign students.

**THE HEAD OF PLACEMENT SERVICES** has available information regarding permanent, summer, or part-time employment. The Placement Service is operated by the National Employment Service.

## **Student Health Services**

During the Fall of 1966, for the first time, the College will be providing a Student Health Services department. This department, under the direction of the Director of Student Health Services, will provide an equipped first aid service staffed by a registered nurse.

**ELIGIBILITY** Although all full-time students of Loyola College who have paid their student activity fee for the academic year are members of the Student Association, they are subject to the following eligibility rules in order that they may take part in student organizations and their activities : 1) they must have shown satisfactory evidence of good conduct as certified by the respective Dean of Men or Dean of Women; 2) they must have shown satisfactory evidence of scholastic application for the previous and/or current academic year as certified by the respective Director of Freshmen or Department Chairman, and they must remain in good academic standing; 3) they must not be under censure at the time of election or appointment; and 4) they must meet any additional requirements established by the government of the Student Association.

**DISCIPLINE** It is the constant purpose of the College to encourage the growth of personal and corporate responsibility consistent with the Christian man. Serious breaches of the code that demands respect for order, morality, personal honour, and the rights of others will necessitate withdrawal from the College. This aspect of student education is the direct responsibility of the Dean of Men.

**MEDICAL EXAMINATION** Students entering Loyola College for the first time are strongly urged to have a medical examination before commencing their college life. Accident insurance forms may be obtained at the Dean of Students' Office.

### **Student government**

The Student Administrative Council is the governing body of the Student Association, of which all full-time day students are members. Its general purpose is to act as co-ordinator of all extracurricular activities on campus other than athletics and publications.

The SAC is composed of three elements : the Executive, the Lower House or Assembly (legislative body), and the Senate or Upper House (judicial body).

A Student Activity Fee, collected from day students at registration, finances the SAC.

### **The Executive**

The President, Vice-President for Internal Affairs, Vice-President for External Affairs, Secretary and Treasurer form the Executive of the SAC. The President and Vice-President for Internal Affairs are elected annually on a ticket basis, and it is they who appoint the other three members of the Executive.

The Executive forms the core of the Executive Council, which is also composed of the Canadian Union of Students Committee Chairman, the President of the Resident Administrative Council, the President of the Athletics Association, and the Dean of Men. The task of the Council is to advise the Executive with regard to the many problems and decisions it faces.

### **The Senate**

The judicial body of the SAC, the Senate, is composed of seven members elected by the Lower House from a slate prepared by the outgoing Senate. Only students in third or fourth years are eligible for election, and there must be at least three members from each of these years.

The Senate is the only body in the SAC which has judicial jurisdiction over any matters affecting either the Council or individual students, and therefore has the power to refuse a constitutional amendment proposed by the Lower House and can forbid the passage of any law it considers unconstitutional. It has the power of final interpretation of the SAC Constitution. Should an organization or student bring shame or dishonour to the SAC or to the College in an activity sponsored by the Council, the Senate has the power to fine those concerned, and may even suspend or expel them from the functions of the Council.

### **The Assembly (Lower House)**

The Assembly is the legislative body of the SAC, Nine of its sixteen voting members are elected by the students within the faculty they represent: the other seven are elected by the heads of the societies within whose category they fall. The non-voting members of the Lower House include the Chairman, Secretary, Senate Representative, Publicity Director, and the SAC Executive and the Dean of Men.

The Assembly deliberates on projects and policies brought to its attention and then gives its approval or disapproval. However, due to procedural changes made recently, the House members will devote much more time working in three commissions (Education, Research, and Structures) which will deliberate, make recommendations and do research into projects of its own. Thus the House will take on a more active and informed role in guiding and determining the direction and policy of the Student Association.

### **SAC Committees**

The workload undertaken by the SAC each year is so enormous that committees are formed to bear a large portion of the burden. The committee chairmen are appointed by the SAC Executive, which receives applications and interviews interested students in late Spring. The members of the committees are then appointed by the chairmen.

The types of committees range from those representing national organizations and those arranging for special events, to those in charge of a specialized administrative area of student government. The Functions and Powers of a few SAC Committees are outlined below.

### **Conference on Inter-American Student Projects (CIASP)**

The Conference of Inter-American Student Projects, founded in Mexico City in July 1963, is an organization of students who do community development work on a non-remunerative basis in the summers in Latin America. The students work chiefly in the fields of education, alphabetization, hygiene, nutrition, recreation, and construction of such community projects as schools, roads, water systems, and sanitation facilities. To date, this work has been concentrated in Mexico. The Canadian and United States CIASP organizations are completely autonomous, but they have in common the name, the symbol, and the

preamble to the constitution. The day-to-day functions of the Canadian organization are carried on by a chairman and a five-man board consisting of a vice-chairman (who is also in charge of programming), directors of transportation, publicity, and finance, and an executive secretary. There are also four regional chairmen in Canada and a CIASP leader in each participating school.

#### **Freshman Reception Association**

A student's first five days on campus are the most important of his College days. It is the responsibility of the FRA to help the student gain insight into the possibilities of his academic life. To this end, the Association works throughout the summer planning events where the freshmen can meet one another and upper-classmen and where they can be integrated into the Loyola spirit.

#### **Radio Loyola**

Radio Loyola exists primarily to serve to inform and entertain the student body. It serves also as a training and experimentation outlet for those students interested in the communications arts and sciences. Originating as a P.A. System in 1962-63, Radio Loyola has progressed to the point where it exists as an actual Radio station with definite programming policies, announcers, operators, record libraries, and writers, and has provided "on the spot" coverage of campus events.

#### **Student Leadership Conference Committee**

This committee organizes Student Leadership Conferences to inform student leaders of all phases of student leadership and to enable them to gain from the experience and methods of others.

#### **Publications**

In 1963 the Administration relinquished its previously held Publishers's rights to the Board of Publications in an agreement with the representatives of the student body. By this agreement the Board accepted both the rights and the responsibilities that jurisdiction over all student campus publications entails.

The Board is composed of five voting members : The Editors-in-Chief of the news and review, the President of the SAC, and two members elected by the Lower House. The Administration's representative is a sixth non-voting member while the director of the Central Advertising Bureau is an ex-officio non-voting member.

Presently under the Board are six publications : *The Loyola News*, the official student newspaper; the *Amphora and the Amalgam*; the *Student Handbook*; *The Student Directory*; and the *Review*.

#### **Social Activities**

The chief social events of the year take shape in the Freshmen week, Home-coming Week, the Athletic and the Faculty dances, the Winter Carnival, and the SAC and LCAA Awards Banquets.

#### **Societies and Organizations**

There are over forty organizations on campus which vary in nature and scope from academic, ethnic, dramatic and musical to professional, political, recreational and special interest. The purpose of a few of these organizations is found below.

#### **Drama Society**

The purpose of the Drama Society is to actively promote interest in drama on campus, and specifically to produce several productions during the academic year.

Past years' productions have included Steinbeck's Of Mice and Men, Ben Johnson's Volpone, an adaptation of Shakespeare's Julius Caesar and James Hassinger's Exit Pursued by a Bear. In the last academic year, the Drama Society produced Trojan Women, Medea and the Brig.

#### **Political Societies**

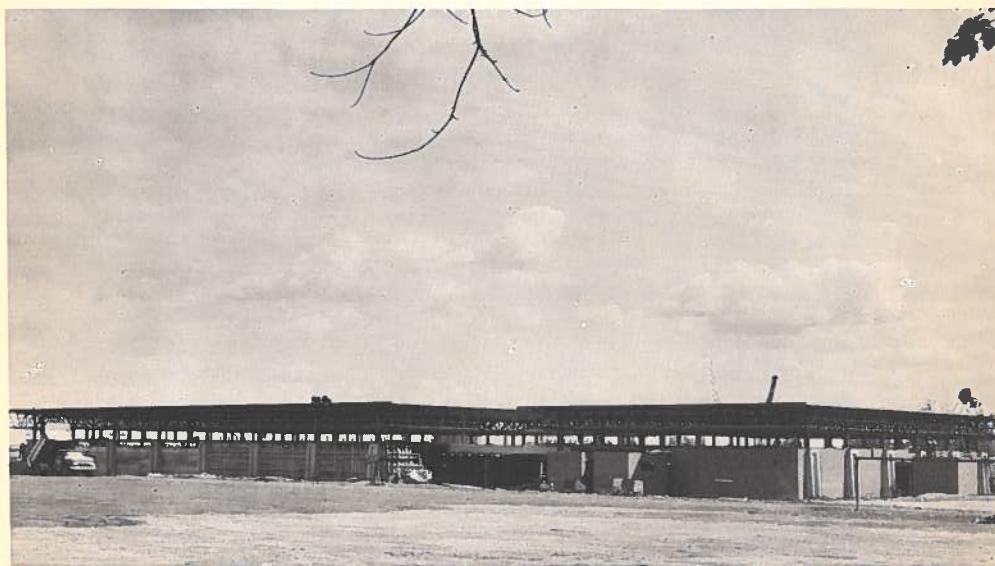
Students interested in politics can work actively to promote their particular political creed through one of the three political clubs on campus; the Campus Creditistes, the Progressive Conservative Club or the Young Liberals, all of which are affiliated with the national parties. Besides campaigning for and participating in the Model Parliament, members of these clubs receive the opportunity to attend regional or even national conferences.

#### **Fraternities and Sororities**

Loyola also has three local general fraternities: Kappa Chi, Theta Sigma, and Sigma Delta Phi; there are two local general sororities — Phi Delta and Lambda Pi Epsilon. Also found on campus is the Phi Lamda Rho professional fraternity for those majoring in pre-medical and pre-dental courses of study.



HINGSTON HALL RESIDENCE



THE PHYSICAL EDUCATION CENTRE (UNDER CONSTRUCTION)

### Athletics

The athletic programme at Loyola is not connected with the Student Administrative Council but functions under the direction of a full-time Athletic Director with the guidance of the Athletic Directorate and the assistance of the LCAA. Until the Athletic Directorate was established in 1963-64 the Lower House administered financial and other control over the LCAA.

The Directorate is responsible for the approval and regulation of the Athletic Budget. The Board also approves policy for the Intramural Athletic Council. The budget with which the Directorate operates consists of a \$13 Athletic Fee collected by the College at registration.

### Loyola College Athletic Association

The primary purpose and responsibility of the Loyola College Athletic Association and that of its executive is assisting the Athletic Director in the promotion of the athletic programme. However, the success of any athletic programme depends upon the student's interest and participation in the variety of physical education activities available.

The Athletic department offers participation in three categories: intercollegiate sports, intramural sports, and physical education instruction.

The LCAA executive consists of a president, a vice-president, a secretary-treasurer, and a publicity chairman. The LCAA Board includes the executive, the Intramural Athletic Council President, the Sports Store Manager, and a representative of each varsity sport. In an attempt to establish a closer union between the LCAA and the IAC, a constitutional amendment was passed recently whereby the LCAA Vice-President also holds the position of IAC President. In the past these two positions were held by separate individuals.

## **Religious activities**

In order to make concrete and personal the religious truths, which the students have studied in the Theology courses, Loyola College offers a programme of religious activities calculated to nourish and deepen their personal and apostolic dedication.

**DAILY MASS** A special Student's Mass is offered daily, Monday to Friday, at 1.00 p.m. in the College Chapel. Two confessors are always available during the Mass.

**SODALITY OF OUR LADY** This organization was established by the Society of Jesus four centuries ago and commissioned by Pope Pius XII in 1948 to meet the needs of the Church by forming competent and dedicated lay leaders. The members undertake an intensive spiritual formation, and dedicate themselves to assist the spiritual, intellectual and social progress of the College, and to promote work in the hospitals and among the poor and underprivileged of the City.

**APOSTLESHIP OF PRAYER** The Apostleship is an association with a two-fold aim: first, to instill into the students that apostolic spirit which, as public men, it is hoped they will later on exercise in the world, and secondly, to join in the great crusade of prayer for Christian unity.

**ST. JOHN BERCHMANS SOCIETY** This Society has as its aim the training and supplying of servers for the Masses and other liturgical functions which take place at the College. The Society is open to all students, resident and non-resident.

**COLLEGE MISSION** At the beginning of the academic year, a special College Mission will be given. The purpose of this mission is to stimulate a renewal of Christian living by re-examining basic Christian values.

**WEEKEND RETREATS** Each year students are invited to make a closed retreat. A special retreat is offered to the Senior students while the other retreats are open to all interested students. A nominal fee is charged for room and board at the Retreat House. Dates and location of retreats will be announced.



COLLEGE CHAPEL

### **John XXIII Diocesan Student Center**

Sponsored by the Archdiocese of Montreal as an information Center on the various Apostolic Works and projects available to Young People. Also counselling and guidance with reference to Religious Vocations to the Priesthood. Visitors welcome to Lounge, Reading Room, and daily Mass in the house Chapel.

*Address : 3500 Belmore Ave.,*

*Phone : 489-6285*

*Director : Rev. D. McCormack.*

### **Academic Counselling**

All aspects of Freshman orientation and Academic Counselling are under the direction of the Director of Freshmen. The upper classman's academic work will be directed by the Head of the Department of the Faculty in which he is registered.

To facilitate counselling and to provide the freshman students with a counsellor from the faculty, a committee of Faculty Advisers operates under the Director. Each Faculty member has from eight to ten students with whom he may become more closely associated than is possible in the lecture room, and whose academic work he reviews periodically with the student.

### **Student life**

Student government, student societies, committees, organizations, and clubs combine to develop in the student body a sense of responsibility, and a capacity for mature dialogue and government. These societies are initiated, developed, and financed by the students themselves, through the medium of the Student Association and its governing body, the Student Administrative Council.

### **Loyola Alumni Association**

The Loyola Alumni Association has as its object the advancement of the interest and the promotion of the welfare of Loyola College, of the Association and its members, and the maintainance of the fellowship developed, during academic life through social, spiritual and cultural activites.

During the course of the year, the Loyola Alumni Association sponsors the Communion Breakfast, Golf Tournament, 'Homecoming' Dinner-Dance, Oyster Party, Memorial Mass and Senior Class Reception.

It also sponsors the selection and presentation of the Loyola Medal to outstanding Canadians and from time to time, Chartered International Flights as a special service to Alumni.

The Loyola Alumni Association publishes a quarterly magazine, the Loyola Alumnus, and offers the services of its office to aid individual classes in organizing and preparing Class Reunions.

A General Meeting is held every year, generally at the College. At this meeting officers for the coming year are elected and all matters of general business transacted.

The Loyola Alumni Association sponsors the Loyola Alumni Student Loan Fund, the Post-Graduate Bursaries, the Under-Graduate Bursaries and the Loyola College Endowment Fund.

The office of the Permanent Secretary is located at Loyola College.

### **university officer training units**

#### **The regular officer training plan**

#### **Introduction**

The Department of National Defence, through the Regular Officer Training Plan (ROTP), sponsors a programme of university education and leadership training for selected numbers of young men who have the potential to become officers in the Royal Canadian Navy, the Canadian Army, or the Royal Canadian Air Force.

Candidates with senior matriculation, junior matriculation, or who are university undergraduates taking suitable courses, are eligible to apply for enrolment as officer cadets in the Service of their choice. The admission standards are high, but for those who qualify, the way is open to a challenging and rewarding career. Students who are selected for the ROTP while attending university will be enrolled in the Service of their choice while continuing their university studies.

Training in the ROTP is divided into two parts. Cadets attend a Canadian Services College or a University throughout the academic year and then go to a unit or training establishment of their Service for training each summer.

### **Academic training**

In general terms, the courses which are needed in business and industry are also required in the Armed Forces. The following are broad patterns : Engineering — Civil, Mechanical, Electrical Engineering Physics, Chemical. Arts — General, Honors. Science — General, Honors. Other specialist courses which may be required by the Armed Forces. (If any course exceeds four years, the student may be accepted for his final four years only).

### **Conditions of service**

Successful applicants will be enrolled as Naval cadets in the Royal Canadian Navy, Officer cadets in the Canadian Army (Regular) or the Royal Canadian Air Force, according to their preferences. Cadets are obliged to maintain good standing academically and in military training. A cadet who fails a year, or who lacks adequate standing in a subject from a previous year, loses his benefits. On the recommendation of his faculty, he may be permitted to repeat one year at his own expense and, if successful, be re-instated.

An Officer cadet who graduates, and has successfully completed his Service training programme during the summer months, is promoted to the commissioned rank of Sub-Lieutenant in the Royal Canadian Navy, Lieutenant in the Canadian Army (Regular) or Flying Officer in the Royal Canadian Air Force (ranks are equivalent).

### **Financial assistance**

Tuition and other essential fees are paid by the Department of National Defence. Officer cadets attending university receive an allowance of \$78.00 each year to purchase books and instruments.

Scale of pay and allowances for ROTP cadets is :

Pay (all Officer cadets) .....	\$78.00 per month
Living allowance (university cadets only)	\$65.00 per month.

Free medical and dental care is provided. Annual Leave (30 days plus travelling time) with pay and allowances may be granted each year, usually after the summer training period.

### **Admission requirements**

An applicant must have the following qualifications :

#### **CITIZENSHIP**

- be a Canadian citizen or a British subject resident in Canada with the status of a landed immigrant.

#### **MARITAL STATUS**

- be single and remain so until commissioned.

#### **MEDICAL**

- be physically fit for enrolment in the Service of his choice.

#### **AGE**

- have reached his 16th birthday, but not his 21st birthday on the first of January of the year of entrance if applying with senior matriculation; or his 20th birthday if applying with junior matriculation. Consent of a parent or guardian is required if he is under 18 years of age.

### **How to apply**

Application should be made through the Commanding Officer of the university unit on campus or through the Resident Staff Officer.

### **University Reserve Units**

#### **General**

The University Reserve Units are organized as sub-components of the Reserves of the three Services as follows :

- (a) Royal Canadian Navy — University Naval Training Division (UNTD).
- (b) Canadian Army — Canadian Officers Training Corps (COTC);
- (c) Royal Canadian Air Force — University Reserve Training Plan (URTP).

#### **Role**

The role of the University Reserve Units is :

- (a) To introduce the university undergraduates to service life so that they may make an intelligent appraisal of the advantages of a service career in one of the Regular Forces;
- (b) To provide selected university undergraduates with the training necessary to qualify them for commissioned rank in the Regular or Reserve forces; and

- (c) To engender in university undergraduates an awareness of the needs, problems and responsibilities of the Armed Forces of Canada, and an understanding of their role.

### **Training**

The normal training programme is divided into two theoretical and two practical phases. Selected officers of each Service will be given a third theoretical and practical phase of training. Each theoretical phase consists of 64 hours of instruction at the university during the academic year. The practical phases each consist of from 12 weeks to 15 weeks of training taken at a service school or unit of the Regular Force. This practical training in interesting fields will reinforce certain university courses and, in some cases, credits are obtained to meet university requirements.

During summer training the undergraduate receives Regular Force pay. Transportation, uniforms, meals, and accommodation are provided as prescribed for officers of the Regular Forces. The officer cadet also receives medical and dental care while on summer training. During the university year, undergraduates may earn up to 16 days' pay for training completed.

### **Commissioning**

Upon successful completion of training, cadets are commissioned, and may be considered for service in the Regular Forces, or the Reserves.

### **fees**

#### **scholastic year — 1966-1967**

##### **Regulations regarding payment of tuition and fees**

**TUITION AND FEES MUST BE PAID AT THE TIME OF REGISTRATION.** However, a student may, in special cases of hardship and with the consent of the Bursar, pay Tuition and Fees in two instalments. The first instalment of Tuition and Fees covering the First term must be paid in full at registration. The second term fees to be paid in full on January 15th following. In such cases an instalment fee of \$10.00 will be charged.

Evidence of Loyola Scholarship Awards or Loyola Bursaries must be submitted at time of registration. If a partial Loyola Scholarship or Bursary is awarded, the balance of Tuition and Fees must be paid at registration.

Students who have applied for Provincial or Federal Government Bursaries must still settle their fees at registration in accordance with the above.

Students will not be considered registered and may not attend classes until the required fees have been paid or arrangements for payment made with the Bursar. Failure to make payments of tuition, fees or other amounts owed the College when due, or to arrange for such payments before their delinquent dates, is sufficient cause to bar the student from classes or examinations and to withhold diploma, scholastic certificate or transcript of record until the debt has been adjusted with the Bursar's Office.

Any damage done to any property of the College will be charged to the offender's account.

Drafts, cheques, money orders, etc., should be made payable at par to "Loyola College" and addressed to the Bursar, Loyola College, 7141 Sherbrooke Street West, Montreal 28, Quebec.

All accounts are subject to revision for adjustment of errors. The College also reserves the right to make changes without notice in the published scale of fees.

## general fees — tuition

● ARTS (General Course)	*	*
All years .....	\$270.00 per half year	\$540.00 per year
● ARTS (with pre-Medical subjects)	*	*
Freshman .....	\$270.00 per half year	\$540.00 per year
Sophomore, Junior and Senior .....	\$287.50 per half year	\$575.00 per year
● SCIENCE	*	*
All years .....	\$287.50 per half year	\$575.00 per year
● ENGINEERING	*	*
All years .....	\$297.50 per half year	\$595.00 per year
● COMMERCE	*	*
All years .....	\$270.00 per half year	\$540.00 per year

\* The above fees were applicable to 1965-66 academic year and are subject to change for the 1966-67 academic year without notice.

### Student activity

Student Administrative Council .....	\$17.00
Student Centre Building Fee .....	10.00
Loyola College Athletic Association .....	13.00
Total — (payable at registration) .....	\$40.00

### Special fees

#### Payable at registration

Tuition, extra subject (in addition to regular program) .....	\$100.00
Registration Fee (payable on first entrance only) .....	5.00
Late Registration Fee — for first day .....	10.00
Late Registration Fee — each succeeding day .....	3.00
Library Fee .....	5.00
Medical Fee .....	3.00
Graduation Fee — 4th year students (payable at registration) .....	20.00

#### Payable on date of each application

Engineering Elementary Survey School, Course Fee .....	60.00
Supplemental examination, each .....	7.00
Specail examinations .....	15.00
Transcripts (Full) .....	1.00
Transcripts (Partial) .....	.50
Parking Permit .....	20.00
Local examination privileges, each examination .....	15.00

### Withdrawals and adjustments

ANY STUDENT WHO IS FORCED TO WITHDRAW FROM A COURSE OR FROM THE COLLEGE IS REQUIRED TO NOTIFY THE REGISTRAR IN PERSON OR IN WRITING. WITHDRAWAL NOTICES FOR PURPOSES OF REFUND WILL BE EFFECTIVE ON DATE OF RECEIPT BY THE REGISTRAR. NO TELEPHONE WITHDRAWALS WILL BE ACCEPTED.

If, after paying the fees, a student finds it impossible to continue at College, a refund of tuition only will be made from date of withdrawal on the following basis :

Registration date to September 30th

A Refund of 7/8 of full year tuition

October 1st to October 31st

A Refund of 6/8 of full year tuition

November 1st to November 30th

A Refund of 5/8 of full year tuition

December 1st to January 15th

A Refund of 4/8 of full year tuition

January 16th to January 31st

A Refund of 3/8 of full year tuition

February 1st to February 28th

A Refund of 2/8 of full year tuition

March 1st to March 31st

A Refund of 1/8 of full year tuition

After March 31st

No Refund.

### Residence

Hingston Hall, completed in 1963 and located on campus, is a modern edifice providing room and board for 306 students. This residence has two, four floor wings, centered by the main entrance and the common lounge. Student recreational facilities, study rooms, offices and chapel are located on the ground floor. Meals are served in an attractive refectory, cafeteria style. The aim of Hingston Residence is to promote spiritual, athletic, social and cultural ideals moulded into an ideal student educational atmosphere. To serve this end, academic and spiritual counsellors as well as proctors are available for student guidance.



MAIN LOUNGE, HINGSTON HALL

Hingston Hall has 132 single rooms and 84 double rooms available. Room facilities include bed linen and blankets.

All Freshmen coming from outside the Montreal area will be obliged to live in Residence.

Parking facilities for resident students are the same as for other students on the campus. Parking permits may be obtained for a fee of \$20.00. Residence fees (exclusive of the Christmas holidays) are as follows :

Double Room .....	\$740.00
Single Room .....	780.00
Damage and key fund .....	15.00
Residence activity fee .....	5.00
Room deposit which must accompany each application .....	50.00

The room deposit of \$50.00 will be deducted from the payment due on entrance. The money will be refunded if the student is not accepted or if the applicant cancels the room reservation by September 1, prior to registration.

RESIDENCE FEES MAY BE PAID IN TWO INSTALMENTS. THE FIRST INSTALMENT OF RESIDENCE FEES COVERING THE FIRST TERM MUST BE PAID IN FULL AT REGISTRATION. THE SECOND TERM FEES MUST BE PAID IN FULL ON OR BEFORE JANUARY FIFTEENTH FOLLOWING.

Residence fees, paid in full, on or before September 1, will be subject to a discount of \$10.00.

No student will be permitted into residence before settlement of the account has been made in accordance with the above regulations.

The College reserves the right to make changes without notice in the published scale of fees, if, in the opinion of the College, circumstances so require.

Students will not be considered registered and may not attend classes until the required fees have been paid or arrangements for payment made with the Director of Residence. Failure to make payments of tuition, fees or other amounts owed the College when due, or to arrange for such payments before their delinquent dates, is sufficient cause to bar the student from classes or examinations and to withhold diploma, scholastic certificate or transcript of record until the debt has been adjusted with the Bursar's Office.

Application for residence should be made to the Manager of Hingston Hall, Loyola College, 7141 Sherbrooke Street West, Montreal 28, Quebec. Application forms and further information may be obtained by writing to the above.

To ensure favourable consideration of your application, it is recommended that applications be submitted prior to August 15.

The College reserves the right to place the student in whatever rooms seem to be best in the interests of the men's programme as a whole, but careful consideration will be given to preferences expressed.

If a student withdraws from residence, a pro-rated refund less ten per cent will be made on room and board.

All residence fees are payable in Canadian funds, and cheques will be made payable to Loyola College. Residents are required to vacate their rooms within 24 hours of the last examination or graduation.

## ADMISSIONS

Admission to first year is granted to students with Junior Matriculation.

Admission to second year is granted to students with Senior Matriculation.

Admission to second and third years is granted to transfer students.

Admission is granted on the basis of ability, achievement and promise as evidenced by :

- 1 Principal's Letter of Recommendation.
- 2 Official Academic Records.
- 3 Results of C.E.E.B. Tests : 2 S.A.T. (verbal and mathematics), 3 achievement tests of the students own choosing.
- 4 Recommendation by the Admissions Committee, after interview if required.

Sometimes the Committee will recommend the admission of a mature student, over 21 years of age, whose secondary education has been interrupted by causes beyond his control. Sometimes it will recommend conditional admission, with probationary requirements. Any student who fails to satisfy his probationary requirement must withdraw and will not be considered for re-admission.

(Note : All documents submitted become the property of the College if the applicant is accepted).

**ADMISSION TO FIRST YEAR** In Canada, Junior Matriculation standing, with college entrance attainment, indicates ability, achievement and promise sufficient for admission into first year : specifically, The Catholic High School Leaving Certificate, Department of Education, Province of Quebec (11 papers), and The High School Leaving Certificate, Department of Education, Province of Quebec (10 papers), with 50 per cent in each paper and an average of 65 per cent for general studies, but 70 per cent for Honours studies and the Engineering programme. Consult individual study programmes for subjects required. English Literature, English Composition, Elementary Algebra and Elementary Geometry are always required. English Literature, English Composition, Intermediate Algebra, Trigonometry, Chemistry and Physics are required subjects for Honours Science Studies and the Engineering Programme.

Some equivalents of the above are : in the United States, Grade XII certificate with the college recommending mark as announced by the particular High School; in Great Britain, the General Certificate of Education, if it indicates satisfactory completion of five subjects at the ordinary level (including English, another language, and Mathematics); in Latin America, a certificate showing satisfactory completion of courses necessary for admission to university in the applicant's own country.

**ADMISSION TO SECOND YEAR** In Canada, Senior Matriculation or its equivalent is sufficient for admission to second year General studies in Arts, Commerce and Science if it is attained with 50 per cent in each paper and an average of 60 per cent. A 70 per cent average is required for Honours studies.

The following subjects are required of all applicants to second year Arts, Commerce and Science :

English Literature, English Composition, French Literature, French Composition, Religion, Algebra II and Trigonometry I.

Additional required subjects are by Faculty :

Arts — two of : History, Latin (Literature and Composition), and Science or Mathematics.

Commerce — Two academic subjects.

Science — Analytic Geometry, Chemistry and Physics. Calculus is required for Honours Science studies. Applicants for admission to the second year of Engineering should consult the Engineering Section of the Calendar.

The General Certificate of Education, if two of its five subjects are at the advanced level, and all subjects are appropriate to the programme desired, will admit an applicant to second year.

**TRANSFER STUDENTS** A transfer student is a student applying for admission to advanced standing with credit given for work done at another college or university.

No student who is ineligible to re-register at his previous college or university will be admitted to this college.

No transfer student may be admitted directly into fourth year.

Two full years of residence are required.

Transfer students must present to the Registrar by July 15th the following documents from the university they left :

- 1) an official certificate of standing (normally not less than 60 per cent average); 2) a statement of honourable dismissal; 3) permission to enter the session, faculty, and year for which application is being made at Loyola College.

Applications for admission should be addressed to the Registrar, Loyola College, 7141 Sherbrooke Street West, Montreal 28, not later than June 15th.

**REGISTRATION** Registration takes place on the days and times assigned. These are given in the Academic Calendar at the beginning of this book. A late Registration fee is charged for registration later than the time assigned — \$10.00 for the first day and \$3.00 for each succeeding day.

Every student registers in the Department designated by the name of his Continuation Subject.



MAIN STAIR CASE, ADMINISTRATION BUILDING

## ACADEMIC REGULATIONS

### Classification of students

- a) A full-time student is one who is registered in four or more full undergraduate courses.
- b) A part-time student is one who is registered in less than four full courses.
- c) A special student is one who is not proceeding to a degree or certificate.
- d) A student on probation is one who is placed on probation by the Committee on Admission or by the Committee on Academic Standing. In case of failure such students will not be permitted to repeat their year but will be required to withdraw.

**RESIDENCE REQUIREMENTS AND LENGTH OF PROGRAMME OF STUDIES** The number of years of attendance required for the attainment of any degree or certificate is as indicated in each programme. This time may be reduced at the discretion of the Committee on Admissions through the transfer of credit from another university. In all cases, attendance at classes for at least two academic years shall be required.

A candidate may be excused attendance for not more than one full academic year or the equivalent through the transfer of credit obtained by attendance at or by correspondence courses from another approved university. A student may take courses for credit in summer school conducted by this or other institutions, subject to the prior approval of the Head of the Department which gives the course and the Head of the Department in which he is registered. Such courses, if approved, may be counted towards degrees. Normally, students who enter with Junior Matriculation standing, will require four complete academic years to obtain a Bachelor's degree.

### Course Load

The normal course load for each year is indicated in the programme for each degree.

Normally a student will be allowed to take only one course in excess of the normal load. The Committee on Academic Standing may, in exceptional cases, allow a student to take two courses in excess, but only if the student has obtained better than average standing in the previous academic session. The year's average will be determined from all courses for which he is registered.

Under certain conditions, a student may be allowed to transfer from one course to another in any year. He must obtain the approval of his Major department. The appropriate instructors should be informed, and a special form should be filled out and given to the Registrar. The last day on which a transfer may be effected is shown in the Academic Calendar.

### **Classification of courses and grades**

a) Courses are referred to as : Half-Courses, in which the subject matter is normally completed in one semester; and Year Courses or Full Courses, in which the subject matter is normally completed in one year.

b) The grading is as follows :

80 - 100 Grade "A" or First Class Honours.

65 - 79 Grade "B" or Second Class Honours.

60 - 64 Grade "C" or Third Class Honours.

50 - 59 Grade "D"

35 - 49 Grade "Fx" — Failure, with supplementary examination privileges in certain cases.

0 - 34 Grade "F" — Failure, with no supplementary examination privileges.

c) The Bachelor's Degree is granted according to these traditional categories :

Cum laude to students with a four year average of between 70% and 79%.

Magna cum laude to students with a four year average of between 80% and 89%.

Summa cum laude to students with a four year average of 90% or over.

### **Attendance regulations**

A student is expected to attend all lectures, discussion groups, seminars and laboratory periods of any courses in which he is registered.

A student who has been absent from more than 20% of the lecture and/or laboratory periods in a course which he has failed will not be allowed to write a supplemental examination in that course. The course must be repeated, or, if an elective, an equivalent course taken.

### **Examinations**

**a) Regular examinations :**

Final examinations in first semester courses are written at the beginning of January; final examinations in all other courses are written in April and May.

**b) Mid-Year Tests :**

Tests are conducted in Freshman courses, on assigned dates before the Christmas vacation. One-hour tests in regular class periods may be held by any Instructor whenever he thinks advisable.

**c) Supplemental examinations :**

A supplemental examination is one set in a subject in which a student (who has not failed his year) has failed to obtain standing at the regular examination, but who has obtained a minimum of 35%.

All supplementals in Year Courses and in second semester courses are held in late August. Supplements for first semester courses however, for Seniors, are held in May. Applications to write August supplemental examinations must be sent to the Registrar before July 15th.

If a student has written and failed the first regular examination in a subject and is eligible to write a supplemental, he must do so the first time this supplemental is scheduled. If he fails to write it at this time, or if he writes and again fails it, he must repeat the course, or an equivalent, if an elective, before re-examination is allowed.

If a student is unable to write the supplemental examination here, he may be granted local privileges upon the payment of the required fee. The student must secure, as presiding official, a qualified member of an educational institution. The student must pay that institution the fee it charges for its services.

For those requesting local privileges, the name, address and consent of the presiding official must be in the Registrar's Office by July 15th, otherwise the student must write at this College.

**d) Special examination and aegrotat standing :**

A special examination is an examination other than the regular or supplemental examination, permitted by the Committee on Academic Standing for a grave reason and after special application. No special examination or aegrotat standing will be allowed except on the recommendation of the Chairman of the Department concerned, after consultation with the instructor involved.

A student who, because of illness, has failed to write the final examinations in January, or the final examinations in April and May, in any courses, may apply for aegrotat standing or for permission to write a special examination, provided he presents a medical certificate to the Registrar.

Reasons other than medical must also be fully documented for consideration by the Committee on Academic Standing.

These documents must be submitted in writing to the Registrar not later than one week after the date in which the examination was held.

Special examinations normally will be written at the time of the supplemental examinations.

#### e) Examination Regulations :

A candidate may not be permitted to the examination hall later than thirty minutes after the beginning of an examination, and he may not leave within thirty minutes after the distribution of examination papers. No articles such as textbooks, notes, books of tables, data sheets, paper, written material, hand-bags, etc., may be taken into the examination hall unless authorized by special instructions. No papers may be taken from the examination hall.

A candidate may not communicate with another candidate; he may not copy from another nor allow another to copy from him.

A violation of these rules may lead to the cancellation of the candidate's examination paper and even to his expulsion from the College.

### Determination of standing

#### Term work

In all subjects, the ratio of term-work to examination mark is determined by the Department concerned. In general, the final examination will not count for less than 50%.

An instructor, with the approval of the Dean and the Chairman of the Department concerned, may require that essays, term papers, etc., be completed satisfactorily and in due time before a student will be granted permission to write the final examination. If the conditions are not fulfilled, the student will be debarred from writing the final examination.

#### Requirements for promotion

- a) A student is eligible for promotion if :
  - i) he has obtained the required pass average; and if
  - ii) he has not failed in more than two full courses.
- b) If a student has failed to obtain the required pass average he may be permitted to repeat.
- c) If a student has obtained the pass average but has failed in more than two courses, he may be permitted to repeat.
- d) A student who has repeated a year, may be promoted to the following year only if he has passed all courses.
- e) If a student has failed a year according to the judgment of the Committee on Academic Standing, he may not take courses in the Evening Division (Summer Session) to qualify for promotion or to become eligible to write supplementals.
- f) A student who has failed a course, or courses (with a minimum of 35%) but who is not obliged to repeat the year's work must write supplemental examinations.
- g) Normally a student will be allowed to carry only one condition (a full course failed) into the following year. The Committee on Academic Standing may make exceptions.
- h) A student must obtain complete standing in his First Year before he may register for the Third Year; and in his Second Year, before he may register for the Fourth Year.
- i) Normally a student must have completed standing in Third Year before he may register for Fourth Year. The Committee on Academic Standing may make exceptions.

#### Transfer students

The promotion of students who transfer to another Faculty or programme of studies will be decided upon by the Dean and the Chairman of the Department to which he is transferring.

#### Failures, repetition and withdrawals

##### Failures

A student fails his year if he has not obtained a passing average; or if, with a passing average, he has failed more than two full courses.

Subjects which depend directly upon the work of a preceding year may not be taken by a student who has failed in the work of the preceding year. A student who fails to pass a supplemental examination will not be eligible for re-examination without a further year's attendance in the course in which he has failed.

#### **Repetition**

A repeating student is one who has failed the previous year here or at any other recognized university, regardless of whether he is registered in the same or a different faculty.

Students may be permitted to repeat a year, subject to the approval of the Committee on Admissions. Students seeking this permission must apply in writing to the Registrar's Office before July 15th.

A student may repeat a course only once, except with permission of the Committee on Academic Standing. However, he may be granted credit on a course in which he has obtained 65% or more. He may not take courses which are scheduled in advance of the year he is repeating.

Repeating students in the First Year who do unsatisfactory work on the Christmas examinations shall be required to withdraw, subject to an appeal to the Committee on Academic Standing, which appeal should be submitted in writing and sent to the Office of the Dean of Studies within one week after the publication of the results. Unsatisfactory work is defined as having an average below 50%.

#### **Withdrawals**

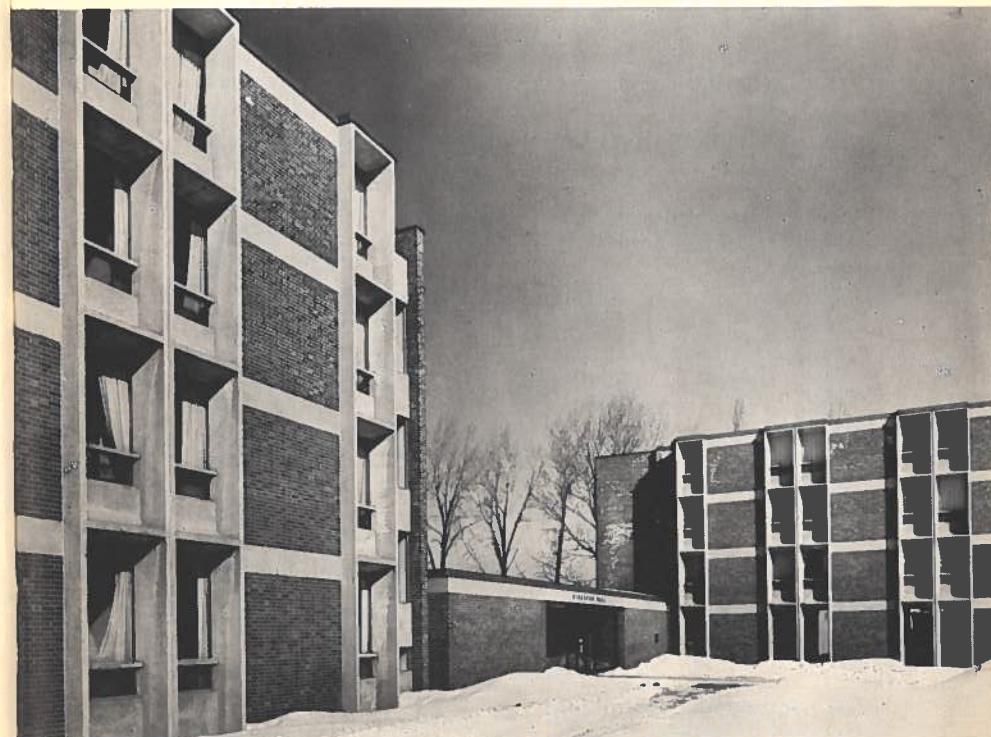
- a) A student who is repeating a year and fails to obtain a pass average in the final examination must withdraw.
- b) A student who is repeating First Year and fails to obtain 50% in the Christmas tests must withdraw.
- c) A student who is on probation and fails to obtain a pass average in the final examinations must withdraw.
- d) A full-time student who fails his year and who has already failed twice (either here or elsewhere) must withdraw.
- e) A student who in his First Year fails to reach a minimum standard in the Christmas tests must withdraw. The minimum standard is defined as an average of 30%.

#### **Rereading**

While all papers in failed subjects are reread before the grades are submitted to the Registrar's Office, and care is taken to record marks accurately, a student who considers that some factor affecting the final mark on the examination was not considered by the examiner, may appeal to have the paper reviewed. This request should be submitted in writing to the Registrar within two weeks of the official publication of student grades, together with a fee of \$10.00.

#### **Reports**

Reports of final examination results of all students are sent to their homes. A mid-year report is also sent to the homes of First Year students.



HINGSTON HALL RESIDENCE

## **scholarships, bursaries and awards**

### **Scholarships**

A scholarship is an award granted annually to a student for academic excellence, which may be renewed if the student maintains an above average (70% overall average) academic standing.

The students will not receive cash unless otherwise stated, but their tuition fees will be fully or partly paid by the scholarships and only the remainder by the students themselves, depending on the value of the scholarships awarded.

The value of Endowed Scholarships may fluctuate depending on the current interest rates. The figures given are based on a five per cent (5%) interest rate. Apart from Entrance Scholarships, candidates for scholarships must have completed at least one year at Loyola College, these students will not have to apply for scholarships, they will be awarded according to their marks and openings available.

No student will be considered eligible for a scholarship who has failed any year in his college or university education. Consideration will, however, be given to the student who has obtained more than a 70% average in each of the two years following the year repeated, e.g., a student who fails in Freshman may be eligible only in his Senior year; a student who fails in Sophomore, Junior, or Senior will not be eligible.

No student with supplemental examinations will be eligible for a scholarship, or if he already holds a scholarship, for its renewal.

For renewal of a scholarship, the student holding the scholarship must obtain an overall average of 70% or more for the current academic year, and must have passed all his final examinations in the courses in which he is registered.

If a student holding a scholarship decided to change faculty he will retain the scholarship only on condition that he receives the approval of the Scholarship Committee.

No student may hold more than one scholarship from the College at any one time.

#### **A. endowed scholarships**

##### **THE LILLY F. BARRY SCOLARSHIP.**

2, Value : \$510 each.

1, Value : 490.

**THE URSULA CARLING SCHOLARSHIPS.** These are an endowment from the estate of the late Mrs. Ursula Carling.

2, Value : \$250 each.

##### **THE CLORAN MEMORIAL SCHOLARSHIP.**

Value \$80.

##### **THE COLLINS-HEFFERNAN SCHOLARSHIP.**

Funds from the Mary Ellen Heffernan Bursary and from the Nelson Collins Scholarship.

Value : \$200.

Conditions : Open to students entering Fourth Arts.

##### **THE CUDDY-STANFORD MEMORIAL SCHOLARSHIP.**

Funds from the John M. Cuddy Scholarship and from the Stanford Memorial Scholarship.

Value : \$200.

Conditions : Open to students entering Third Commerce.

##### **THE DOWLING-MORIARTY SCHOLARSHIP.**

Funds from the estate of the late Francis J. Dowling, and of the late Mrs. E. Stowell, widow of John Moriarty.

Value : \$200.

Conditions : Open to students entering Fourth Engineering.

##### **THE MRS. F. J. DUCKETT SCHOLARSHIP** From the estate of the late Mrs. F. J. Duckett.

Value : \$200.

**THE FRIENDS OF LOYOLA SCHOLARSHIP.** From the funds endowed for the James Corcoran Scholarship, the Rev. William Doherty Scholarship, the Dollard Scholarship, and the Gregory O'Bryan Scholarship, and from funds given by the Student's Penny Scholarship. Value \$200.

**THE ARTHUR HALLY MEMORIAL SCHOLARSHIP.** Endowment from P. F. Halley of St. John's Newfoundland in memory of his son, Arthur, a graduate of the Pre-Medical class of 1946, magna cum laude, who died on the eve of Convocation.

Value : \$100.

Conditions : Open to students entering Fourth Arts (Bio-Chem.) or Fourth Science (Bio-Chem.).

**THE MR. AND MRS. THOMAS WILLIAM KAVANAUGH MEMORIAL SCHOLARSHIP.** Donated by the Rev. Thomas W. Kavanaugh.

Value : \$120.

**THE LOYOLA SODALITY SCHOLARSHIP.** Funds from the Sodality Scholarship and from the Loyola Scholarship Club Association Bursary.

Value : \$200.

**THE MAHONEY-MURPHY MEMORIAL SCHOLARSHIP.** Originally established as the Mother Ellen Memorial Scholarship, and as the John Walsh Murphy Memorial Scholarship.  
Value : \$200.

**THE KENNETH J. McARDLE MEMORIAL SCHOLARSHIP.** Donated by Mrs. Mary McArdle as a tribute to the memory of her late husband Kenneth J. McArdle.  
Value : \$125.

Conditions : Open to students entering Second Science (Honours Mathematics or Major Mathematics).

**THE ST. IGNATIUS PARISH SCHOLARSHIP.** Money collected and presented to the St. Ignatius Men's Association and originally known as the Coronation Arts Course Scholarship.  
Value : \$100.

**THE SHARP-O'REILLY SCHOLARSHIP.** Funds from the Alice M. Sharp Scholarship, and from the Winnifred O'Reilly Memorial Bursary.  
Value : \$200.

#### B. gifts by the College

##### LOYOLA COLLEGE SCHOLARSHIPS.

Entrance scholarships are awarded by the Scholarship Committee to students entering Loyola College from Grades XI and XII, a few are reserved for upper year students. These scholarships cover full tuition fees, and are automatically renewable from year to year until the student obtains his degree as long as the student performs satisfactorily. A student's performance is judged satisfactory if a student passes every course without supplemental examinations, and obtains an overall average of at least 70% in each year at Loyola College.

These scholarships will be awarded on the basis of the principal's recommendations, the candidate's High School record and the results of the student's final examinations in High School. Applications must be forwarded to Loyola College, Director of Financial Aid before May 1st.

#### SECOND YEAR

ARTS, Number : 13, Value : Full Tuition.  
COMMERCE, Number : 1, Value : Full Tuition.  
SCIENCE, Number : 11, Value : Full Tuition.  
ENGINEERING, Number : 6, Value : Full Tuition.

#### THIRD YEAR

ARTS, Number : 11, Value : Full Tuition.  
COMMERCE, Number : 1, Value : Full Tuition.  
SCIENCE, Number : 10, Value : Full Tuition.  
ENGINEERING, Number : 7, Value : Full Tuition.

#### FOURTH YEAR

ARTS, Number : 13, Value : Full Tuition.  
COMMERCE, Number : 5, Value : Full Tuition.  
SCIENCE, Number : 8, Value : Full Tuition.  
ENGINEERING, Number : 6, Value : Full Tuition.  
**THE BARTLETT MEMORIAL SCHOLARSHIP.**  
Value : \$80.

**THE BARTLETT-DOHERTY MEMORIAL SCHOLARSHIP.** Value : \$80. Open to students entering Third Science.

**THE GASSON MEMORIAL SCHOLARSHIP.** Value : \$200. Open to students entering Third Commerce.

**THE JONES MEMORIAL SCHOLARSHIP.** Value : \$200.

**THE McCARTHY MEMORIAL SCHOLARSHIP.** Value : \$200.

**THE McMAHON MEMORIAL SCHOLARSHIP.** Value : \$160.

**THE O'BRYAN MEMORIAL SCHOLARSHIP.** Value : \$200.

**THE O'DOWD MEMORIAL SCHOLARSHIP.** Value : \$200.

**THE PRESIDENT'S SCHOLARSHIPS.** Number 3.  
Value : One, \$160; two, \$150 each.

**THE J. S. O'NEIL SCHOLARSHIP.** Value : \$150.  
Donated by J. S. O'Neil.

#### C. Annual gift scholarships

**THE CHARLES BROWN MEMORIAL SCHOLARSHIP.** Value : \$50.

**THE MRS. CHARLES BROWN SCHOLARSHIPS.** Number : Two. Value : \$100, each. Open to students entering Third Commerce.

**THE GUTELIUS MEMORIAL SCHOLARSHIP.** Value : \$100. Open to students entering Fourth Commerce.

**THE KNIGHTS OF COLUMBUS COUNCIL 284 SCHOLARSHIP.** Value : \$150.

**THE STATE COUNCIL, KNIGHTS OF COLUMBUS, PROVINCE OF QUEBEC SCHOLARSHIP.** Value : \$100.

### Bursaries.

A Bursary is a sum of money given to a student in order to assist him financially in the continuation of his studies.

A Bursary will take the form of a credit made to the student's tuition account. Ordinarily bursaries will not be awarded to students with less than a 50% overall average.

Students desiring bursaries must make written application to : The Director of Financial Aid, Loyola College, Montreal, 28.

Applications for bursaries must be made :

a) no later than September 1st. Applications received after the closing date will be retained and considered only after the second closing date.

b) no later than December 20th. Applications received after this second closing date will not be considered and will be returned to the applicants. Students coming to Loyola for the first time may apply for a second semester bursary.

Students are permitted to make only one application in any given academic year.

### Province of Quebec

The Province of Quebec has an extensive programme of Bursary-Loan assistance available to students who have been domiciled and resident in the Province of Quebec for at least the last two years before being admitted for the first time to the institution they are attending. For application forms the student must write direct to :

Department of Education,  
Gouvernement of Quebec,  
Student Aid Service,  
Parliament Buildings,  
Quebec, P.Q.

and ask for an official application form. The student then fills in the form, has it signed by his parents, and has it stamped and verified at the Financial Aid Office, and then sends it back to Quebec so that it arrives there before the 30th of September. On no account are completed applications considered after the 30th of September.

### Federal Loan Plan

Students residing outside the Province of Quebec, but studying in an Institution of Higher Learning in the Province of Quebec may apply for a loan under this plan. Contact the bank manager in your home town for information and details.

**THE IBM THOMAS J. WATSON MEMORIAL BURSARIES.** Donated by the International Business Machines Company Limited as part of the IBM Thomas J. Watson Memorial Bursary Programme. Number : Two. Value : \$500, each. Awarded annually to needy undergraduates in any year and faculty who are in good academic standing. Apply to the Director of Financial Aid. Closing date September 1st.

**THE LOYOLA ALUMNI ASSOCIATION UNDERGRADUATE BURSARIES** : Number : Four. Value : \$100. Awarded annually to talented and deserving students who have completed at least one year at Loyola College. Apply to the Director of Financial Aid prior to the 20th of December.

**THE LOYOLA ALUMNI ASSOCIATION POST GRADUATE BURSARIES.** Number, four. Value : \$100. Awarded annually to talented and deserving students of the current graduating class who have been accepted for post graduate work at a recognized university. Apply to the Alumni Office.

**THE LOYOLA AFRICAN BURSARIES.** Type "A", number : four. Value : varies (includes full tuition, registration fee, room and board). Awarded to qualified and deserving students from any country in Africa who intend to aid their homeland's development. Type "B", number : six. Value : varies (includes full tuition and registration fee). Awarded on the same conditions as Type "A".

**THE LOYOLA BURSARY FOR THE BLIND.** Number : one. Value : full tuition for one year; renewable. To a blind student who is qualified to follow regular courses.

**THE ST. PATRICK'S SOCIETY BURSARY.** Number : one. Value : \$200. Awarded annually by the St. Patrick Society of Montreal, preferably to a Fourth Year Student, in any faculty, who is Irish or of Irish extraction. Application forms may be obtained at the office of the Director of Financial Aid. Closing date is December 20th.

**THE TOUCHE, ROSS, BAILEY AND SMART BURSARY.** Number : one. Value : \$200. "The Bursary . . . will be awarded annually to a student who is completing his third year and will be entering his final year, majoring in Accountancy in the Faculty of Commerce, and who intends on graduation to pursue the qualification of Chartered Accountant. The award will be made on the basis of academic record, ability, personality and other suitable characteristics . . .".

**THE BIRKS FAMILY FOUNDATION BURSARIES.** A limited number of bursaries are available under this plan. The student's financial need and academic standing will be considered in the granting of these bursaries. Apply to the Director of Financial Aid.

**SOCIETE ST. JEAN BAPTISTE:** Le Prêt d'Honneur. Le Prêt d'Honneur offers a loan plan to students during 12 months of the year. Requests for applications should be made to the Director of Financial Aid.

**NATIONAL COUNCIL OF JEWISH WOMEN OF CANADA MONTREAL SECTION, BURSARIES.** A limited number of bursaries are awarded by the Council upon the recommendation of the Financial Aid Director. Academic standing and financial need are considered in making the award. Although there is no legal obligation, the Council hopes that the holders will, if possible, return the money at some future time, so that other students may be helped by the College. Apply to the Director of Financial Aid.

**THE LOYOLA ALUMNI STUDENT LOAN FUND.** The Loan Fund exists to aid students who are in financial difficulties. Because of limited resources, the trustees of the Fund normally will consider loans to students who : 1) have been successful in their last set of final examinations at Loyola; 2) are receiving a bursary from the Province of Quebec; and 3) are prepared to repay the loan by the end of the summer.

Applications should be made in writing to : Loyola Alumni Student Loan Fund, Loyola College, 7141 Sherbrooke Street West, Montreal, 28.

**B'NAI B'RITH HILLEL FOUNDATION.** A limited number of bursaries are available. Amount of each bursary granted from this fund may vary according to the need of any deserving student in any year or faculty, chosen by the Scholarship Committee, with-

out regard to race, religion or nationality. Apply to the Director of Financial Aid.

**THE LOAN FUND OF THE LOYOLA STUDENT ASSOCIATION.** This fund was established with a view to aiding students who are in dire financial need. Further details may be obtained at the temporary student center building.

#### **Commonwealth Scholarships**

Under a Plan drawn up at a conference held in Oxford in 1959, each participating country of the Commonwealth offers a number of scholarships to students of other Commonwealth countries. These scholarships are mainly for graduate study and are tenable in the country making the offer. Awards are normally for two years and cover travelling, tuition fees, other university fees, and a living allowance. For details of the awards offered by the various countries consult the Registrar's office or write to The Canadian Universities Foundation, 77 Metcalfe Street, Ottawa, Ontario.

**CHILDREN OF WAR DEAD (EDUCATION ASSISTANCE) ACT.** Passed on July 1st, 1953, this Act provides assistance towards an education beyond secondary school level for sons and daughters of veterans whose deaths resulted from military service during World War I, World War II, or the Korean War. If the application is approved, the Department of Veterans Affairs will pay : a) to each student an allowance of \$25 per month for the period during which he or she is attending a full-time course, up to a maximum of 36 months; b) to the University, tuition fees and other costs as described in the Act, up to a maximum of \$500 per academic year. Apply to the Department of Veterans Affairs.

#### **Awards**

**GOVERNOR-GENERAL'S MEDAL.** Presented by His Excellency the Governor General of Canada to the student with the highest overall average in the four years of Arts.

**LIEUTENANT-GOVERNOR'S SILVER MEDAL.** Presented by His Honour the Lieutenant-Governor of the Province of Quebec to the student with the highest overall average in the four years of Science.

**LIEUTENANT-GOVERNOR'S BRONZE MEDAL.** Presented by His Honour the Lieutenant-Governor of the Province of Quebec to the Student with the highest overall average in the four years of Commerce.

**LOYOLA GOVERNOR'S MEDAL.** Presented by the Loyola Board of Governors to the student with the highest overall average in the four years of Engineering.

**THE LOYOLA C.O.T.C. MEDAL.** Presented by the Loyola College C.O.T.C. to the most representative Loyola student among the graduates.

**THE PHILOSOPHY GOLD MEDAL AWARD.** Presented by Loyola College to the outstanding student in Philosophy among the graduates, and awarded upon the recommendations of the Philosophy professors.

**THE HAMILTON WATCH AWARD.** Presented by the Hamilton Watch Company to the student who has most successfully combined proficiency in Accounting with achievement, either academic, extra-curricular, or a combination of both in the social sciences or humanities.

**THE HAMILTON WATCH AWARD.** Presented by the Hamilton Watch Company to the student who has most successfully combined proficiency in Mathematics with achievement, either academic, extra-curricular, or a combination of both, in the social sciences or humanities.

**THE SOCIETY OF CHEMICAL INDUSTRY, CANADIAN SECTION, MERIT AWARD.** Presented by the Society of Chemical Industry to the Highest ranking (minimum 75%) student in the fourth year, majoring in Chemistry, Chemistry-Physics, or Chemistry-Mathematics, and who has completed the course in the normal number of years.

#### Prizes

**THE WILLIAM H. ATHERTON PRIZE.** Donated by the late Dr. William H. Atherton, and to be awarded to the student outstanding for research in Canadian History.

**THE ISAIAH S. BENJAMIN PRIZE FOR MATHEMATICS.** Donated by Dr. Isaiah S. Benjamin of Montreal to the Third Year student with the highest three year average in Mathematics subjects.

**THE CAE PRIZE FOR ENGINEERING.** Donated by CAE Industries Ltd. to a graduating student with the highest four year average in the Engineering subjects.

**THE CHEMCELL (1963) LIMITED PRIZE FOR CHEMISTRY.** Donated by Chemcell (1963) Limited and awarded to the graduating student with the highest four year average in Chemistry subjects.

**THE CHEMCELL (1963) LIMITED PRIZE FOR ENGLISH.** Donated by Chemcell (1963) Limited and awarded to the graduating student in the Arts programme, taking a Major or an Honours in English, with the highest four year average in English subjects.

**THE ECONOMICS PRIZE.** Granted by the College to the graduating student in Arts or Commerce, taking a Major or an Honours in Economics, with the Highest four year average in Economics subjects.

**THE FRENCH LANGUAGE PRIZE.** Donated by the Government of France and awarded to the graduating student who has shown the greatest progress in the French language courses offered at Loyola College.

**THE GERMAN LANGUAGE PRIZE.** Donated by the Consulate General of the Federal Republic of Germany to the student who has shown the greatest progress in the German Language course offered at Loyola College.

**MONTREAL ECONOMIC ASSOCIATION PRIZE.** Donated by the Montreal Economic Association to the third year student taking an Honour or Major in Economics with highest three year average in his economics courses.

**THE KNIGHTS OF COLUMBUS PRIZE FOR CANADIAN HISTORY.** Donated by the Knights of Columbus of the Province of Quebec and awarded to the student who has obtained the highest mark in Canadian History during the current academic year.

**THE R. E. O'CONNOR PRIZE FOR MATHEMATICS.** Donated by Dr. Isaiah S. Benjamin of Montreal to the student graduating in Science or Engineering with the highest four-year average in Mathematics subjects.

**THE PHYSICS PRIZE.** Granted by the College to the graduating student in Physics with the highest four year average in Physics subjects.

**THE DR. JACQUES SMITH MEMORIAL PRIZE.** Donated by Dr. Kurt Ekler in memory of Dr. Jacques Smith, chief of surgery at the Hotel Dieu Hospital, St. Jerome, and a graduate of Loyola, who died suddenly in 1960 at the age of thirty six. Awarded to the graduating student with the highest four year aggregate standing in the Biology-Chemistry course (Science or Arts).

**THE MRS. ALFRED THIBAUDEAU PRIZE FOR POLITICAL SCIENCE.** Donated by Miss Madeleine Thibaudeau in memory of her mother, Madame Alfred Thibaudeau, and to be awarded to the graduating student with the second highest average in the field of Political Science.

**THE MRS. RENEE VAUTELET PRIZE FOR POLITICAL SCIENCE.** Donated by Mrs. Renée Vautelet and to be awarded to the graduating student with the highest average in the field of Political Science.



DRUMMOND SCIENCE BUILDING AND DRUMMOND SCIENCE AUDITORIUM

## courses

### The faculty of arts

Students admitted to Arts follow General and Honours programmes of twenty-two courses for four years.

A General Arts student will choose a field of concentration ("major") from : Biology-Chemistry (which meets pre-medical requirements), Classics, Communications, Economics, English, French, History, Philosophy, Political Science, Psychology, Sociology, Spanish, Theology. The field of concentration is normally chosen at the end of first year.

An Honours student, one who welcomes the opportunity for deeper and more intensive study, with an eye, perhaps, to post-graduate studies, will choose (subject to departmental approval) from : Economics, English, French Studies, History, Philosophy, Political Science, Theology. He must have better than 70% matriculation average, and 65% yearly average (with not less than 65% in any course) to maintain honours standing.

A chosen field of concentration or honours programme may dictate the electives to be taken in first year. Students should consult with the department of their choice during the period of academic counselling preceding registration.

### Faculty of commerce

The inauguration of the Faculty of Commerce at Loyola in 1948 marked a significant modernization of the traditional philosophy of education. Areas of concentration in Business and Accounting were set up to meet the demands for orientation in the field of Commerce. Loyola has, at present, an Honours course in Economics and Majors in Accounting and Economics and intends to offer a major in Business in the near future. The Honours programme is designed for students who want a deeper and more extensive knowledge in their field of concentration and who wish to pursue post-graduate studies. The Faculty has retained all the necessary disciplines essential to a broad education. This would include courses in English, Philosophy and Theology. The general requirements for admission and the standards are similar to those in the other faculties (see page —).

At the end of the first year the student decides the area in which he will concentrate. Students who choose to follow a Major must maintain a yearly average of 60%; those in the Honours programme must maintain a yearly average of 65%, and not less than 65% in any course in their field of concentration. All candidates must have a minimum of twenty-two recognized academic credits to receive the degree. All inquiries should be made in writing to the Director of Commerce.

#### **Faculty of Science**

The Major programme leading to a Bachelor of Science degree is four years of study in a field of concentration in one of Biology-Chemistry, Chemistry, Mathematics, Psychology, Physics. Applicants to this programme must show better than average marks in science and mathematics.

The Honours Science programme, which begins at the Sophomore level, may be followed in Chemistry, Mathematics or Physics. The Honours Chemistry fulfills the requirements for professional membership in the Chemical Institute of Canada. Applicants for the Honours programme must have at least a 70% average in their final high school examinations. Those who enter Honours programmes must have successfully passed courses in Intermediate Algebra and Trigonometry. Throughout the Honours programme students must maintain a yearly average of 65% and obtain not less than 65% in any course of their field of concentration. Freshmen who wish to follow an Honours programme should consult with the Departments concerned at the sessions of academic counselling which precede Registration.

#### **Faculty of Engineering**

The Faculty of Engineering at this time offers the degree of Bachelor of Science, based on a four year program of studies. Students, who, at the end of their third year wish to complete their course and to achieve an Engineering degree at another university after a further two years of study, will be awarded a Certificate in Engineering if they have completed all the requirements of the first three years.

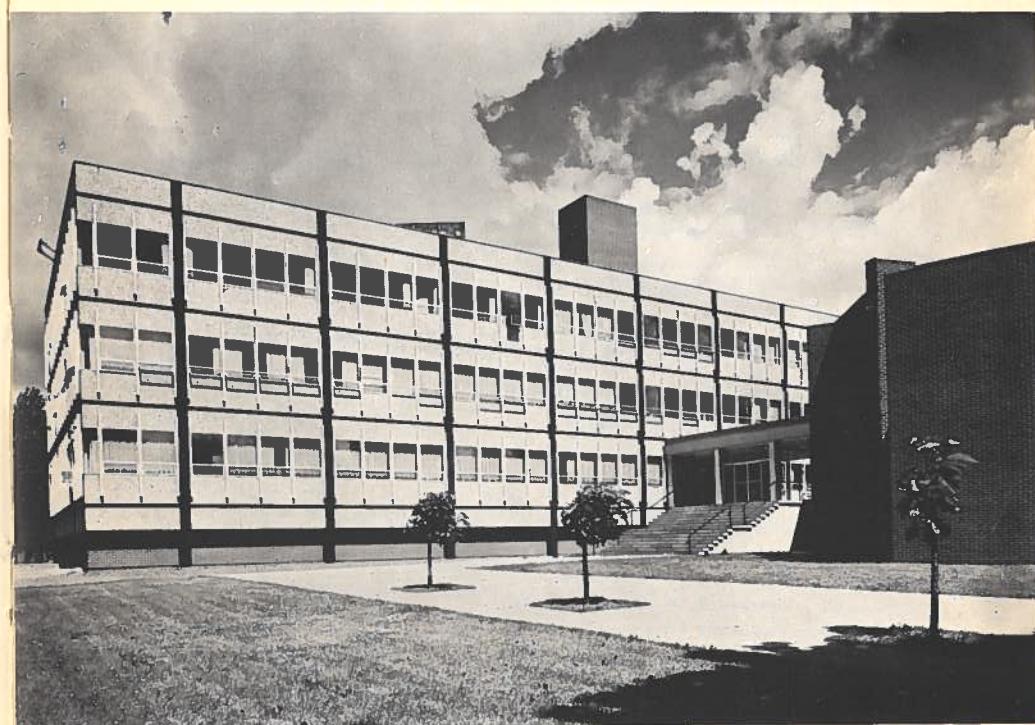
The curriculum embodies the Liberal Arts traditions that have been part of Loyola's Engineering since 1945.

Normally, applicants are admitted who have achieved Junior Matriculation at the standard set forth

in the engineering section of the Calendar. However, Senior Matriculants also are accepted and are registered in the Second Year of the programme, if they have completed courses equivalent to those of the First Year of Engineering.

Enquiries are invited from applicants wishing to submit programmes which they consider the equivalent of those described in the engineering section of the Calendar.

Geotechnical Science offers a programme of basic sciences, geology and allied fields including some appropriate engineering subjects. Honours Geotechnical Science are not offered but the Major programme is of sufficient calibre that graduates with a Second Class standing are prepared for admission to graduate studies at many North American Universities.



DRUMMOND SCIENCE BUILDING AND PART OF DRUMMOND SCIENCE AUDITORIUM

## programme index

### Programmes leading to a Bachelor of Arts degree.

Major in Biology-Chemistry

Major in Classics

Major in Communication Arts

Major in Economics

Major in English

Major in French

Major in History

Major in Philosophy

Major in Political Science

Major in Psychology

Major in Sociology

Major in Spanish

Major in Theology

Honours in Economics

Honours in English

Honours in French

Honours in History

Honours in Philosophy

Honours in Political Science

Honours in Theology

### Programmes leading to a Bachelor of Commerce degree.

Major in Accounting

Major in Economics

Honours in Economics

### Programmes leading to a Bachelor of Science degree.

Major in Biology-Chemistry

Major in Chemistry

Major in Geotechnical Science

Major in Mathematics

Major in Physics

Major in Psychology

Honours in Chemistry

Honours in Mathematics

Honours in Physics

### Programme leading to a B.Sc. in Engineering.

### Programme leading to an Engineering Certificate.



## accounting

R.L. McGraw Assistant Professor (Chairman)

L. M. Bessner, Associate Professor

J.R. Hanrahan Assistant Professor

D. F. MacDonald Assistant Professor

H.B. Ripstein Assistant Professor

E. C. Whitehall Lecturer

### Course leading to a B. Comm. with a Major in Accounting.

FIRST YEAR	SECOND YEAR	THIRD YEAR	FOURTH YEAR
ACCOUNTING 101 Economics 102 English 101 French Maths 101 Theology	ACCOUNTING 202 Business 201 Business 204 French Philosophy Maths 202-203	ACCOUNTING 303 ACCOUNTING 306 Philosophy Theology Elective (1) *	Accounting 405 Accounting 406 English Philosophy or Theology Elective (1)

\* Electives may be taken from Business, Economics, Mathematics, Political Science, Psychology, Sociology.

Students holding the Bachelor of Commerce degree with a Major in Accounting from Loyola College are usually exempted on recommendation from the intermediate examinations of the Institute of Chartered Accountants of Quebec. They are also usually exempted from three of the five years of apprenticeship required for the C.A. certificate.

All other graduates of the College who wish to enter the profession of Accounting, but who have not followed the curriculum (as described above) for an Accounting Major, may do so by successfully completing a prescribed course of training which normally consists of three years of Evening Courses in Accounting, with at least two years of service in an approved office. For additional information, please consult the Chairman of the Accounting Department.

Additional optional courses may be taken with permission of the Chairman of the Accounting Department.

#### 101 Elements of Accounting. Full Course. Staff

A general introduction to accounting. The preparation and use of work sheets and financial statements including an examination of the books, ledgers and other data used in the preparation of these statements. In addition the legal and accounting aspects of various forms of business organizations, sole proprietorship, partnerships and limited companies are discussed. Lectures : 3 hours per week for two terms. Texts: *Accounting*, Meigs & Johnson, Can. Ed., McGraw-Hill.

#### 202 Intermediate Accounting. Full Course. Staff

A continuation and extension of Accounting 101. Limited companies, legal and accounting aspects of the component of shareholder's equity, share capital, contributed surplus, retained earnings. Analysis and interpretation of financial statements. Percentage and ratio analysis, analysis of working capital — asset turnover and conversion periods. Preparation and use of statement of source and application of funds. Lectures : 3 hours per week for two terms. Texts : To be announced.

**303 Accounting and Auditing. Full Course.** R. L. McGraw

Continuation of Accounting 202 — Intangible fixed assets, liabilities and reserves. Introduction to auditing; classification and scope of audits; internal control; legal and moral responsibilities of auditors with reference to court decisions; fraud and error in accounts; requirements of Federal and Provincial Companies Acts; Audit certificates and reports; programmes and working papers.

Lectures : 3 hours per week for two terms.

Texts : Finney and Miller, *Principles of Accounting* — Intermediate. Can. 5th ed. Prentice Hall; Stettler, *Auditing Principles*, Prentice Hall; Smails, *Auditing*, Ryerson; Quebec Companies Act, Queen's Printer; Companies Act, Queen's Printer; *Bulletins of Canadian Institute of Chartered Accountants*.

**306 Accounting and Auditing — Advanced. Full Course.**

E. C. Whitehall

Joint ventures; installment sales; holding companies; consolidations; mergers; amalgamations; re-organization and reconstruction; branch accounts and consignments including foreign entities.

Investigations : nature and classes of business investigations; requirements for prospectus; sale of business by proprietors, partnerships and corporations with valuation of goodwill.

Lectures : 3 hours per week for two terms.

Texts : Karrenbrock and Simons, *Advanced Accounting*. 3rd ed., Southwestern. Smails, *Accounting Principles*. Ryerson.

**310 Accounting. Full Course.**

A course offered by the Accounting Department to students in the Faculties of Arts, Science and Engineering :

Includes explanation and use of Accounting; major forms of Business entities; analysis and interpretation of Financial Statements; control of business operations, budgeting and profit planning; function and use of Cost Accounting; Income Tax Theory; use of Machine Accounting; Commercial and Life Insurance; Estate Planning, including Gift Tax, Federal Estate Tax and Provincial Succession Duties.

PURPOSE : — to give non-business students an understanding and appreciation of general language of Accounting.

No prerequisite in Accounting is required.

Texts : To be announced.

**405 Cost Accounting, Estate Tax, Bankruptcy and Income Tax. Full Course.**

L. M. Bessner

Cost Accounting : terms and cost formulae; elements of cost; cost reports; estimating cost systems; standard costs; job costs; variances; cost ratios; differential and direct costing.

Budgetary Control : preparation and control of the budget, variable expense budgets.

Executorships : charge and discharge statements; capital and income; division of an estate; estate tax and succession duties.

Bankruptcy and Liquidation Accounts : receiver's accounts; priority of creditors; statement of affairs; deficiency account; realization and liquidation statement.

Income Tax : individuals; proprietors; partners; corporations; general considerations.

Lectures : 3 hours per week for two terms.

Texts : Matz, Curry and Frank, *Cost Accounting*. 3rd ed., Gage. Karrenbrock and Simons, *Advanced Accounting*, 3rd ed., Southwestern. Gilmour, *Income Tax Handbook, 1965-66 Estate Tax Act*. Queen's Printer. *Canadian Bankruptcy Act*. Queen's Printer.

**406 Advanced Auditing and Specialization. Full Course.**

E. C. Whitehall

A continuation of Accounting and Auditing : commercial and life insurance including pension plans; machine accounting; investigations for frauds, etc.; report writing in detail; Fund Accounting, including hospitals, municipalities, universities and non-profit organizations; rules of professional conduct; management advisory services.

Lectures : 3 hours per week for two terms.

Texts : Karrenbrock and Simons, *Advanced Accounting*. 3rd ed., Southwestern. Finney and Miller, *Principles of Accounting Advanced*. Can. 5th ed. Prentice-Hall. Stettler, *Auditing Principles* 2nd ed., Prentice Hall.

**biology**

Rev. S. Drummond, S.J. Professor (Chairman)

Rev. R. T. Cronin, S.J. Assistant Professor

K. S. Dhindsa Sessional Lecturer

J. G. Rochefort Sessional Lecturer

**Courses leading to a B.A. with a Major in Biology-Chemistry.**

FIRST YEAR	SECOND YEAR	THIRD YEAR	FOURTH YEAR
Classics 102 or 111 or 112 or 121	BIOLOGY 202 CHEMISTRY 101	BIOLOGY 304 BIOLOGY 305	BIOLOGY 406 BIOLOGY 408
English 101	CHEMISTRY 102	CHEMISTRY 212	CHEMISTRY 221
French	Classics 112 or 202	Philosophy	CHEMISTRY 222
Mathematics 101	or 212 or 221	Physics 101	English
Theology 101	French	Theology	Mathematics 202
Elective (1)	Philosophy	Theology	Philosophy

**Courses leading to a B.Sc. with a Major in Biology-Chemistry.**

FIRST YEAR	SECOND YEAR	THIRD YEAR	FOURTH YEAR
CHEMISTRY 101	BIOLOGY 202	BIOLOGY 304	BIOLOGY 406
CHEMISTRY 102	CHEMISTRY 212	BIOLOGY 305	BIOLOGY 408
French	CHEMISTRY 221	CHEMISTRY 323 (a)	CHEMISTRY
Mathematics 106	CHEMISTRY 222	CHEMISTRY 324	323 (a) (b)
Mathematics 107 and 108, or 205	Philosophy	Mathematics 202	English (c)
Mathematics 206	Theology	Philosophy	Philosophy or Theology
Physics 101			Psychology
Theology 101			Social Science Elective (1)

(a) Revised course replacing both Chemistry 323 and Chemistry 425 of previous years.

(b) To be discontinued after 1966-67.

(c) To be offered in 1967-68.

- 101 Fundamental Biology. Full Course.** J. G. Rochefort  
 A series of lectures and demonstrations designed to acquaint the general student with those fundamental principles of life which are the basis for an understanding of the structure and function of the living body.  
 Lectures : 3 hours per week for two terms.

- 202 Invertebrate Zoology. Full Course.** R. T. Cronin  
 Theory. The course begins with a study of scientific methodology and its application to the living sciences. The nature and characteristics of protoplasm are explained and these are correlated with a discussion of the cell as the unit of structure and function. These basic principles are then utilized in a detailed study of the phyla of the invertebrate animals.  
 Laboratory. A detailed study of representative animals of the invertebrate phyla. The first part offers intensive exercises in the use of the microscope and the interpretation of microscopic sections. The second half affords training in manual dexterity necessary for precise dissection.  
 Lectures : 2 hours per week for two terms.  
 Lab. : 3 hours per week for two terms.  
 Text : Storer and Usinger, *General Zoology*, McGraw-Hill.

- 221 General Zoology. Full Course.** K. S. Dhindsa  
 A study of the zoological principles of structure, function and development in a selected series of invertebrate and vertebrate animals. Registration is limited to students in the Psychology Major Programme.  
 Lectures : 2 hours per week for two terms.  
 Laboratory : 3 hours per week for two terms.  
 Textbook : Storer and Usinger, *General Zoology*, McGraw-Hill.

- 304 Vertebrate Zoology Theory. Full Course.** S. Drummond  
 The course opens with a study of the characteristics and classification of the vertebrates. The basic structure of the vertebrate body is outlined. Following this, the important type vertebrates are studied in detail, particular stress being laid on embryological development, structure and function.  
 Prerequisite : Biology 202 Theory.  
 Lectures : 2 hours per week for two terms.  
 Text : Storer and Usinger : *General Zoology*, McGraw-Hill.

- 305 Vertebrate Zoology Laboratory. Half Course.** S. Drummond  
 The course comprises a detailed study of the structure of amphioxus, dogfish, frog and rabbit. The course is so conducted that, by training in exact dissection, observation and the preparation of carefully executed drawings, the student may be able to trace the main features of organization from the lower to the higher vertebrates.  
 Prerequisite : Biology 202 Lab.  
 Lab. : 6 hours per week for two terms.  
 Text : Storer and Usinger : *General Zoology*, McGraw-Hill.  
 Craigie-Bensley, *Practical Anatomy of the Rabbit*. Univ. of Toronto Press.

- 406 Histology. Half Course.** S. Drummond  
 Theory. On introductory study of the cell, cell division and the general tissues. The course is designed to explain in detail the structure and function of the basic tissues and to introduce the various combinations of these in the special tissues of the adult body.  
 Laboratory. A series of exercises designed to introduce the student to the fundamentals of cytological and histological technique, and to illustrate, by means of prepared slides, mitosis, meiosis, as well as the microscopic characteristics of the basic types of histological tissues.  
 Lectures : 2 hours per week for one term.  
 Lab. : 3 hours per week for one term.

- 408 Genetics. Half Course.** R. T. Cronin  
 Theory. A series of lectures designed to explain the principles of heredity and variation.  
 Laboratory. A selection of experiments to demonstrate the methods and principles of genetics.  
 Lectures : 2 hours per week for one term.  
 Lab. : 3 hours per week for one term.



## business

L. M. Bessner Associate Professor (Acting Chairman)  
 R. Hanrahan Assistant Professor  
 P. Kawaja Assistant Professor  
 E. Prevost Lecturer  
 L. A. Saint-Pierre Lecturer  
 Those interested in Business please consult the Director of Commerce.

## FULL COURSES

- 201 Commercial Law. Full Course.** L. A. Saint-Pierre  
 Laws of contracts, sales agency, partnership, company law and negotiable instruments.  
 Lectures : 3 hours per week for two terms.

- 204 Business Economics. Full Course.** P. Kawaja  
 This course consists of three main elements : (1) an explanation of the fundamental theoretical and analytical tools of economics ; (2) a review of empirical studies and illustrations of the applications of economic analysis in management ; and (3) cases involving actual managerial situations which require the use of analysis.  
 Second Year Standing.  
 Prerequisite : Economics 102.  
 Lectures : Three hours per week for two terms.  
 Texts : To be announced.

- 301 Finance. Full Course.** R. Hanrahan  
 A study of the corporate investment in assets and the source of funds available to finance this investment. Emphasis is placed on statement analysis and the use of short term financing. The use of preferred and common stock and long term debt is examined from the view point of the corporation and the investor.  
 Third Year Standing.  
 Prerequisite : Accounting 101.  
 Lectures : Three hours per week for two terms.  
 Text : To be announced.

### HALF COURSES OFFERED IN FIRST TERM

#### 310 Administration of the Firm. Half Course. P. Kawaja

An introduction to the basis of management through a study of management principles, a description of the various schools of management theory, the functions of the manager, and a brief analytical inquiry into a major foundation of management-authority and responsibility. The five major managerial functions of Planning, Organizing, Staffing, Direction and Control are analyzed and described.

Third year standing.

Lectures: First Term only. Three hours per week.

Text: H. Koontz and C. O'Donnell; *Principles of Management*, 2nd ed., McGraw-Hill Book Company, Inc.

Cases: W. H. Newman, *Cases for Administrative Action*, Prentice Hall.

#### 320 Marketing Management : Half Course. P. Kawaja

An introductory course that examines the job of the Marketing Manager. Factors affecting consumer demand and methods of satisfying it ; product management ; marketing channels management ; management of selling and customer services ; management of pricing ; marketing planning and control.

Third year standing.

Lectures: First term only. Three hours per week.

Text: E. W. Cundiff and R. R. Still, *Basic Marketing, Concepts, Environments and Decisions*; Prentice Hall.

Cases: E. Bursk, *Cases in Marketing Management*.

#### 330 Control : Half Course. R. Hanrahan

A study of the systems available to management for the control of operations and consequently the maximization of profit. Capital budgeting is examined to determine the profitability of investment in fixed assets.

Third Year Standing.

Lectures: First Term only. Three hours per week.

Text: To be announced.

### HALF COURSES OFFERED IN SECOND TERM

#### 340 Production : Half Course. R. Hanrahan

An analytical approach to the allocation of resources and the scheduling of production. Quantitative analysis will be used in the solution of problems on these areas.

Third year standing.

Lectures: Second term only. Three hours per week.

Text: To be announced.

#### 411 Policy Determination and Operations : Half Course. P. Kawaja

An integrative course in which cases relating to two or three corporations are used to expose students to the conditions under which management is accomplished. Students are organized into a task force to deal with a continuing series of problems.

Fourth Year Standing.

Lectures: Second Term only. Three hours per week.

#### 421 Sales Management : Half Courses. P. Kawaja

This course deals with (1) the principles and policies of sales organization and some typical sales organizational structures ;

(2) sales operation, including such topics as selecting, training, compensating, supervising and stimulating salesmen ; (3) sales planning, including such tasks as determining sales and market potentials, forecasting sales, preparing sales department budgets and establishing territories and quotas ; (4) an analysis of sales operation and evaluation of salesmen's productivity and effectiveness.

Third year standing.

Lectures: Second Term only. Three hours per week.

Text: W. J. Stanton and R. H. Buskert, *Management of the Sales Force*, Revised Edition, R. D. Irwin.

#### 422 Advertising Management : Half Course. E. Prevost

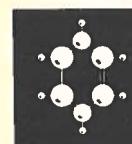
A General Introduction to the field of advertising via lectures and case discussion. The advertising function and how it relates to marketing ; History, Function and Purpose ; Agency revenues and how they are derived ; agency organization and client relationships ; campaign planning ; copy writing and advertising art ; media planning and execution ; print and broadcast production ; marketing and advertising research ; publicity, public relations, sales promotion and merchandising ; accounting and cost control ; billing methods ; the future of advertising and its role in the economy.

Third year standing.

Lectures: Second Term only. Three hours per week.

Texts and Cases: *Advertising Management*, by Neil H. Borden & Martin V. Marshall ; Richard D. Irwin, (Homewood, Ill.)

### chemistry



Rev. A. Graham, S.J., Associate Professor (Chairman)

K. Ekler Associate Professor

D. McElcheran Associate Professor

T. Nogrady, Associate Professor

M. Doughty Assistant Professor

G. J. Trudel Assistant Professor

#### Courses leading to an Honours B.Sc. in Chemistry.

FIRST YEAR	SECOND YEAR	THIRD YEAR	FOURTH YEAR
CHEMISTRY 101	CHEMISTRY 211	CHEMISTRY 313	CHEMISTRY 425 (b)
CHEMISTRY 102	CHEMISTRY 212	CHEMISTRY 323 (a)	CHEMISTRY 426
French	CHEMISTRY 221	CHEMISTRY 324	CHEMISTRY 435
Mathematics 106	CHEMISTRY 222	CHEMISTRY 332	CHEMISTRY 436
Mathematics 205	CHEMISTRY 231	CHEMISTRY 333	CHEMISTRY 437
Mathematics 206	Philosophy	CHEMISTRY 334	CHEMISTRY 438
Physics 101	Theology	English	CHEMISTRY 450
Theology 101		Mathematics 308	Philosophy
			or Theology

#### Courses leading to a B.Sc. with a Major in Chemistry.

FIRST YEAR	SECOND YEAR	THIRD YEAR	FOURTH YEAR
CHEMISTRY 101	CHEMISTRY 212	CHEMISTRY 211	CHEMISTRY 332
CHEMISTRY 102	CHEMISTRY 221	CHEMISTRY 313	CHEMISTRY 334
French	CHEMISTRY 222	CHEMISTRY 323 (a)	CHEMISTRY 425 (b)
Mathematics 106	CHEMISTRY 231	CHEMISTRY 324	CHEMISTRY 426
Mathematics 206	Philosophy	CHEMISTRY 333	Philosophy
Mathematics 107	*Theology or English		or Theology
and 108, or 205	Mathematics 205	Philosophy	
Physics 101	Theology	Theology	(if necessary)

\* Theology should be taken in 2nd year if Mathematics 205 is not taken; if Mathematics 205 is taken in 2nd year, Theology should be taken in 3rd year.

(a) Revised course (essentially Chemistry 425 of previous years) replacing Chemistry 323 in 1966-67.

(b) New course to be first offered in 1967-68.

**101 General Chemistry. Full Course.**

M. Doughty,

K. Ekler, G. J. Trudel

Principles of Chemistry. Molecular and Atomic theories. Balancing Equations. Valence. Oxidation-reduction. Nature and concentrations of solutions. Chemical Equilibrium, Ionization constants. Solubility product. Common ion effect. pH. Formation and dissolution of precipitates. Complex ions. Theory of acids and bases. Periodic table.

Lectures : 3 hours per week for two terms.

Texts : Sisler, *College Chemistry*. 2nd ed., Macmillan. Sorum. *Introduction to Semimicro Qualitative Analysis*. 3rd ed., Prentice-Hall. Schaum, *Theory and Problems for Students of College Chemistry*. 4th ed., Schaum.

**102 General Chemistry. Half Course.**

M. Doughty, G. J. Trudel

An introductory course designed to improve manipulative ability in the laboratory. A first semester of inorganic preparations and volumetric titrations is followed by one devoted entirely to qualitative analysis.

Lab. : 3 hours per week for two terms.

Text : Sorum, *Semimicro Qualitative Analysis*. 3rd ed., Prentice-Hall.

**211 Inorganic Chemistry and Valence Theory. Half Course.**

K. Ekler

Atomic and Molecular Structure. Valence. Electro-negativity. Bond angles and lengths. Coordination chemistry. Chemical periodicity.

Lectures : 1 hour per week for two terms.

**212 Elementary Inorganic Quantitative Analysis.****Full Course.**

K. Ekler, G. J. Trudel

Theoretical aspects of gravimetric and volumetric analysis. Acid-base and oxidation reduction titrations. Determination of ores by volumetric methods. Theory of precipitation and complex formation analysis.

Lectures : 1 hour per week for two terms.

Lab. : 3 hours per week for two terms.

Text : Kolthoff and Sandell, *Quantitative Inorganic Analysis*. Macmillan.

**221 Organic Chemistry Theory. Full Course.**

M. Doughty

Introductory course in nomenclature, type reactions and synthesis of aliphatic, alicyclic and aromatic hydrocarbons and their derivatives. Theoretical aspects including resonance, orbital theory and simpler reaction mechanisms are introduced.

Prerequisite : 3 hours per week for two terms.

Text : English and Cassidy, *Principles of Organic Chemistry*. McGraw-Hill.

**222 Organic Chemistry Laboratory. Half Course.**

A. Graham, T. Nogrady

A systematic preparation of simpler organic compounds; the theory of fundamental techniques such as steam distillation; filtration; the determination of physical constants. To be taken in conjunction with Chemistry 221.

Prerequisite : Chemistry 102.

Lab. : 3 hours per week for two terms.

Text : Cason and Rapoport, *Laboratory Text in Organic Chemistry*. Prentice Hall.

**231 Introductory Physical Chemistry. Full Course.**

D. McElcheran

The principles of physical chemistry, based on elementary kinetic theory and thermodynamics. Includes the following topics : the gas state, first and second laws of thermodynamics, liquid and solid states, solutions, homogeneous and heterogeneous equilibria, reaction kinetics, electrochemical phenomena. Problems form an integral part of the course.

Lectures : 3 hours per week for two terms.

**313 Instrumental Analysis. Full Course.**

Staff

A study of modern instrumental methods in inorganic and organic analysis. Electrochemical absorption, optical and radiochemical methods, mass spectrometry, chromatography, NMR and X-ray diffraction are discussed.

Prerequisite : Chemistry 212, 221, 231.

Lectures : 2 hours per week, first semester.

Laboratory : 3 hours per week, second semester.

**323 Organic Chemistry Theory. Full Course.**

A. Graham, T. Nogrady

Selected topics of polymer and natural products chemistry, including carbohydrates, proteins, terpenes and steroids, heterocyclics and alkaloids. Reaction mechanisms and stereochemical aspects are treated extensively. The biological significance of many compounds is stressed.

Prerequisite : Chemistry 221.

Lectures : 2 hours per week for two terms.

**324 Identification of Organic Compounds. Full Course.**

M. Doughty, A. Graham

Theory and practice of organic qualitative analysis : most of the laboratory time is given to the identification of unknown compounds and the separation and identification of a simple mixture.

Prerequisite : Chemistry 222.

Lectures : 1 hour per week for two terms.

Lab. : 3 hours per week for two terms.

Text : McElwain, *The Characterization of Organic Compounds*. Macmillan.

**332 Advanced Physical Chemistry. Full Course.**

D. McElcheran

Selected topics include : structure of solid state, surface phenomena, the colloidal state, phase rule.

Prerequisite : Chemistry 231.

Lectures : 2 hours per week for two terms.

**333 Physical Chemistry Laboratory. Half Course.**

D. McElcheran

To be taken in conjunction with Chemistry 332.

Lab. : 4 hours per week (one afternoon) for one term.

Text : Daniels *et al.*, *Experimental Physical Chemistry*. 5th ed., McGraw-Hill.

**334 Thermodynamics. Full Course.**

D. McElcheran

A thorough study of classical thermodynamics. Considerable emphasis placed on physical as well as chemical application.

Prerequisite : Chemistry 231; Mathematics 205.

Lectures : 2 hours per week for two terms.

**\*425 Organic Chemistry Theory. Full Course.** T. Nogrady

An advanced study of physical organic chemistry and stereochemistry. The electron theory of reaction mechanisms such as nucleophilic aliphatic substitution, elimination and addition reactions, aromatic substitution, free radical mechanisms, are discussed in depth. Modern concepts of stereochemistry and conformational analysis are also covered.

Prerequisite : Chemistry 221, 323.

Lectures : 2 hours per week for two terms.

Text : R. Breslow, *Organic reaction mechanisms*, Benjamin.

\*Not offered this year.

**426 Organic Preparation Laboratory. Full Course.**

M. Doughty, A. Graham, T. Nogrady

The student performs a varying series of more difficult preparations and is expected to become proficient in such techniques as vacuum distillation, catalytic hydrogenation and the manipulation of larger scale bench equipment. A sound knowledge of theory is required.

Prerequisite : Chemistry 222, 324.

Lab. : 6 hours per week for two terms.

Text : Vogel, *A Text-Book of Practical Chemistry*. Longmans.

**435 Advanced Physical Chemistry Laboratory. Half Course.**

D. McElcheran

A continuation of Chemistry 333, but fewer and more demanding experiments.

Prerequisite : Chemistry 333.

Lab. : 4 hours per week for one term.

**436 Electrochemistry. Half Course.**

K. Ekler

Electrolytic conduction and electrolysis : Faraday's laws; specific and equivalent conductance and measurement of conductance; mobility and transport number; theory of strong electrolytes; thermodynamics of cells; electrode potentials; concentration cells; liquid junction potentials; overvoltage and polarization phenomena.

Prerequisite : Chemistry 332, 334.

Lectures : 2 hours per week for one term.

**437 Kinetic Theory and Chemical Kinetics. Half Course.**

D. McElcheran

The classical atomic theory. Kinetic theory of gases; the statistical mechanical approach to the Maxwell-Boltzman Distribution; Collision phenomena. Reaction Kinetics. The rate laws; Classical collision theory; Activated State Theory; Reaction Mechanisms; Free Radical chemistry; Chain processes.

Prerequisite : Chemistry 332, 334.

Lectures : 2 hours per week for one term.

**438 Quantum Chemistry. Half Course.**

The transition from classical to modern physics. Michelson-Morley experiment — special theory of relativity, Planck's Black Body Radiation. Photoelectric effect; Radioactivity and the fundamental particles; the Rutherford-Bohr atom. Schrodinger Wave Equation; Atomic Spectra, Molecular structure and bonding.

Lectures : 2 hours per week for one term.

**450 Senior Thesis. Half Course.**

Staff

The Department will make available to selected students a senior thesis in Organic or Physical Chemistry to be done in the second term. Students taking Chemistry 450 will not take Chemistry 426 as a Half Course.

**classics**

J. E. Lempkowski Assistant Professor

(Acting Chairman)

D. Brown Assistant Professor

T. Hoey, S.J. Associate Professor

Mrs. B. Wardy Lecturer

B. Fahey Sessional Lecturer

The requirements in Classics for Arts students may be fulfilled in the following ways :

- Classics 102, 202.
- Classics 111 and 112, or 112 and 212.
- Classics 121, 221.

Note : all students in Greek and Latin are required to provide themselves with dictionaries.

**Courses Leading to a B.A. with a Major in Classics.**

FIRST YEAR	SECOND YEAR	THIRD YEAR	FOURTH YEAR
Classics 102	Classics 202	Classics 302	Classics 303
English 101	Classics	Classics 402	Classics 403
French	Elective (1)	Philosophy	Philosophy
Mathematics 101 or Science 101	from 111, 330, 350	Theology	Electives (2)
Theology 101 Elective (1)	English French Philosophy Theology	Elective (1)	

The course leading to a B.A. with a Major in Greek follows a similar pattern. Those interested should consult the Department Chairman.

**102 Latin Literature and Prose Composition. Full Course.**

Staff

Cicero's *Pro Archia*, selections from the poems of Catullus and the *Odes* of Horace. Latin grammar is studied principally for the better comprehension of the authors, but also for the development of some facility in prose composition.

Prerequisite : Junior Matriculation Latin or Classics 101.

Lectures : 3 hours per week for two terms.

**111 Elementary Greek. Full Course.**

Staff

A course for those with no previous knowledge of Greek.  
Lectures : 3 hours per week for two terms.

**112 The Character of Socrates. Full Course.** J. E. Lempkowski

A study of Socrates as he is portrayed in Plato's *Apology* and *Crito*, and caricatured in Aristophanes' *Clouds*.

Prerequisite : Junior Matriculation Greek or Classics 111.

Lectures : 3 hours per week for two terms.

**121 Classics in Translation. Full Course.**

D. Brown and J. E. Lempkowski

- A. The Greek and Roman Historians.  
An examination of the ancient historians' estimate of man's moral and social behavior, and the role he plays in the developments of his time.
- B. The Classical Epic.  
A study of the heroic character in the epics of Homer, Apollonius of Rhodes and Virgil.  
Lectures : 3 hours per week for two terms.

**202 Latin Literature and Prose Composition. Full Course.**

B. Wardy

Cicero's *Pro Lege Manilia*, and Books 2, 4 and 6 of the *Aeneid*. Advanced work in grammar and prose composition.  
Prerequisite : Classics 102.

Lectures : 3 hours per week for two terms.

**212 Homer : The Iliad. Full Course. (Not offered in 1966-67)**

A study of the form, content and style of the earliest European epic. Books 1, 3, 6, 9, 16, 22, 24 in Greek; the entire work in English.  
Prerequisite : Classics 112.  
Lectures : 3 hours per week for two terms.

**213 Greek Literature. Full Course.** D. BrownDemosthenes' *Philippicks* and Euripides' *Alcestis*.

Prerequisite : Classics 112.

Lectures : 3 hours per week for two terms.

**221 Classics in Translation. Full Course.**

T. Hoey, S.J., J. E. Lempkowski

## A. Greek Drama.

A study of selected plays by Aeschylus, Sophocles, Euripides, Aristophanes and Menander.

## B. Roman Satire.

The origin and development of the literary form which the Romans considered to be particularly their own, The *Satires* of Horace and Juvenal, Petronius' *Satyricon*.  
Lectures : 3 hours per week for two terms.

**302 Roman History and Biography. Full Course.**

(Not offered in 1966-67).

Livy, Book 1 ; Tacitus, *Agricola*. A consideration of the methods and style of the two writers.

Prerequisite : Classics 202.

Lectures : 3 hours per week for two terms.

**303 Latin Literature. Full Course.** D. Brown

Book 10 of Quintilian's *Institutio Oratoria* and *Epistulae* of Cicero and Pliny.

Prerequisite : Classics 202.

Lectures : 3 hours per week for two terms.

**312 Herodotus and the Lyric Poets. Full Course.**

(Not offered in 1966-67)

Prerequisite : Classics 212.

Lectures : 3 hours per week for two terms.

**330 History of Ancient Greece and Rome. Full Course.**

(Not offered in 1966-67)

Lectures : 3 hours per week for two terms.

**402 Poetry of the Augustan Age. Full Course..**

(Not offered in 1966-67)

A detailed examination of the Roman elegists and Ovid's *Metamorphoses*.  
Prerequisite : Classics 202.

Lectures : 3 hours per week for two terms.

**403 Roman Satire. Full Course.** J. E. LempkowskiHorace, Juvenal, and Petronius' *Cena Trimalchionis*.

Prerequisite : Classics 202.

Lectures : 3 hours per week for two terms.

**412 Greek Tragedy. Full Course.** T. Hoey, S.J.

Aeschylus' *Agamemnon*, Sophocles' *Oedipus Rex*, and Euripides' *Hippolytus* in Greek ; the entire *Oresteia* and the *Poetics* in English.

Prerequisite : Classics 312.

Lectures : 3 hours per week for two terms.



D. A. Bonyun Asst Professor (Director)  
The following courses are offered in Computing Science.

**010 Fortran Programming.**

A non-credit course offered to all students on a voluntary basis. The course includes basic Fortran programming techniques and sufficient card handling to enable the student to compile and run his own programs on the IBM 1620. This course is offered twice in the academic year.  
Lectures : 1 hour per week for 8 weeks.

**015 Machine Language Programming and SPS.**

A non-credit course offered to all students on the basis of a selection test. The course is designed for students with a good pre-college mathematical background or with prior programming experience. Basic IBM 1620 machine language including iterative routines for square root and other basic functions is emphasized. The Symbolic Programming System, automatic coding, and introduction to compilers are also included.  
Lectures : 1 hour per week.

**105 Computers in Society. Full Course.**

A history of Computers and the impact of present day electronic computers on society. The Abacus and simple counting machines, Turing machines and elementary recursive functions, desk calculators and the modern electronic digital computers. Sociological and economic implications of automation. Inter-discipline contributions to the theory of computer science.  
Lectures : 2 hours per week for two terms.

**201 Fortran Programming and Numerical Analysis.****Full Course.**

A detailed study of fundamentals of digital computers and related machinery. Binary numbers, floating point arithmetic, flow charting, simple machine language instructions, automatic coding in Fortran, assemblers, compilers, etc. Numerical methods of interpolation, solution of polynominal equations and simultaneous equations, approximations, matrix manipulation, Monte Carlo techniques. Student use of the IBM 1620 will be emphasized.

Prerequisite : Mathematics 205 (First course in Calculus).  
Lectures : 2 hours per week for two terms.

**305 Numerical Analysis and Fortran Programming for Engineers.**

Offered only to engineering students as Engineering 350.

**communication arts**

Rev. J. E. O'Brien, S.J., Assistant Professor (Chairman)  
J. Buell Associate Professor  
Rev. D.J. Fogarty, S.J., Associate Professor  
Rev. M. Gervais, S.J., (on leave) Assistant Professor  
D. F. Young Sessional Lecturer  
D. Clark Lecturer

The Department bases its work in communication theory, cinema, radio, and television on a solid foundation in the liberal arts.

The curriculum is intended to develop in students a scholarly and creative approach to mass media. It is designed —

- a. for students who intend to continue graduate studies in communication;
- b. for students who intend to make a career in the public arts as writers, critics, directors, and performers;
- c. for students who wish to enter the teaching profession as specialists in cinema and television;
- d. for students who intend to enter the media industries, the media professions, and the public arts in the areas of publicity, promotion, advertising, and public relations.

**Courses leading to a B.A. with a Major in Communication Arts.**

FIRST YEAR	SECOND YEAR	THIRD YEAR	FOURTH YEAR
Classics 102 or 111 or 112 or 121	Classics 112 or 202 or 212 or 221	Comm. Arts Electives (3)	Comm. Arts Electives (3)
English 101	Comm. Arts 201	Philosophy	Philosophy
French	English	Theology	Elective (1) *
Mathematics 101 or Science 101 Social Science Elective (1) Theology	French Philosophy Theology		

\* One elective in Social Science or other approved by Communication Arts Department.

**050 Experimental Workshop in Radio.**

D. Clark

Non-credit course. Prerequisite : Communication Arts 201 or consent of the Instructor.

**✓ 201 Mass Communications and Society.**

J. E. O'Brien

A survey lecture course on the origins, development, structure and function, control and support of mass communications with emphasis on the communication process, the content, the audiences, and the social effects of the media.

**202 Drama and Theatre in the Western World.**

J. Buell

A study of the Greek, Medieval-Elizabethan, and Modern forms of drama in their theatrical and cultural contexts. The plays chosen will be studied mainly from two viewpoints : a) drama-form and dramatic technique, and b) significance as embodied in the cultural symbols of the period (myth, religion, psychology). A fairly wide background reading in plays and cultural history will be required from the student.  
Prerequisite: Communication Arts 201 or consent of Instructor.

**301 Mass Media and Fictional Forms.**

J. Buell

A study of the communicational and art forms of film, radio, television, and print. The course will examine among other things : the evolution of the traditional dramatic and fictional arts into their mass-medium forms, the actual forms and formats necessitated by the mass media, the basic function of image and symbol in mass communication and art, the entertainment aspect of mass reception, and current practices, problems, and possible developments in these fields.  
Prerequisite: Communication Arts 201 or consent of Instructor.

**✓ 302 Speech for Communication Arts.**

D. Young

A study of the basic principles and practices of oral communication in the preparation and delivery of expository, persuasive, and occasional speeches and in the application of communication theory to conference leadership situations.  
Prerequisite : Communication Arts 201 or consent of the Instructor.

**303 Creative writing for Communication Arts.**

Staff

A course designed to stimulate the student's critical and creative faculties in areas of the mass media, through the analysis of basic forms and preparation and organization of original material for the media.  
Prerequisite: Communication Arts 201 or consent of Instructor.

**304 Advertising and Public Relations.**

J. E. O'Brien and D. J. Fogarty

A study of advertising as mass communication in marketing — decisions and audiences, rate schedules and contracts; preparation of scripts and coordination of extended campaigns; the role of publicity media and methods in modern public relations and the analysis of successful public relations programmes.  
Prerequisite : Communication Arts 201 or consent of the Instructor.

**401 Seminar in Theories of Communication.** D. J. Fogarty  
 A study of the Communication process, the individual as communicator, communication in the group, group process in mass communication, theory of audiences, theory of content, mass media in campaigns, mass media and personal influence, general theories of effects.  
 Prerequisite: Communication Arts 201 or consent of the Instructor.

\***310 History and Development of the Cinema.**

\***311 Film Criticism.**

\***312 The Documentary and Educational Film.**

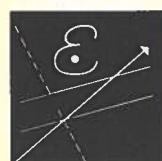
\***402 Seminar in Communication Research.**

\***403 Seminar in Creative Writing.**

\***410 Fundamentals of Scenery, Sound, Camera, and Editing for Television Film.**

\***411 Experimental Workshop in Cinema-Television.**

\*Not offered in 1966-67.



### economics

F.J. Hayes Associate Professor (Chairman)  
 S. A. Alvi Assistant Professor  
 W. J. Carroll Assistant Professor  
 J. M. Dauvergne Assistant Professor  
 A. G. Lallier Assistant Professor  
 I. J. Masse Assistant Professor  
 P. V. Mini Assistant Professor  
 Rev. W. F. Ryan, S.J. Assistant Professor  
 A. Vicas Assistant Professor

#### Courses leading to an Honours B.A. in Economics.

FIRST YEAR	SECOND YEAR	THIRD YEAR	FOURTH YEAR
Classics 102 or 111 or 112 or 121	Classics 112 or 202 or 212 or 221	ECONOMICS 304 ECONOMICS 308 or 411 or 417	ECONOMICS 410
ECONOMICS 102	Economics 205	ECONOMICS	ECONOMICS
English 101	Economics 207	Elective (1)	Elective (1)
French	French	Philosophy	Philosophy
Mathematics 101	Philosophy	Theology	Theology
Theology 101	Elective (1)	Elective (1)	Elective (1)

#### Courses leading to a B.A. with a Major in Economics.

FIRST YEAR	SECOND YEAR	THIRD YEAR	FOURTH YEAR
Classics 102 or 111 or 112 or 121	Classics 112 or 202 or 212 or 221	ECONOMICS 305 ECONOMICS 308 Elective (1)	ECONOMICS Elective (1)
ECONOMICS 102	ECONOMICS 204	Philosophy	English
English 101	ECONOMICS 207	Theology	Philosophy
French	French	Elective (1)	Theology
Mathematics 101	Philosophy	Theology	Elective (1)
Theology 101	Elective (1)	Elective (1)	

#### Courses leading to an Honours B. Comm. in Economics.

FIRST YEAR	SECOND YEAR	THIRD YEAR	FOURTH YEAR
Accounting 101	Business 201	ECONOMICS 304	ECONOMICS 410
ECONOMICS 102	ECONOMICS 205	ECONOMICS 308	• or 411 or 417
English 101	ECONOMICS 207	ECONOMICS	ECONOMICS
French	French	Elective (1)	Elective (1)
Mathematics 101	Philosophy	Philosophy	Philosophy
Theology 101	Elective (1)	Theology	or Theology
		Elective (1)	Acct. or Business
			Elective (1)
			Elective (1)

#### Courses leading to a B. Comm. with a Major in Economics.

FIRST YEAR	SECOND YEAR	THIRD YEAR	FOURTH YEAR
Accounting 101	Accounting 202	ECONOMICS 305	ECONOMICS
ECONOMICS 102	Business 201	ECONOMICS 308	Elective (1)
English 101	ECONOMICS 204	Philosophy	English
French	ECONOMICS 207	Theology	Philosophy
Mathematics 101	French	Elective (1)	or Theology
Theology 101	Philosophy		Electives (2)

Notes (a) Of the three Electives, one must be selected from the faculty in which the student is registered; the other two may be selected from any faculty subject to the approval of the department which offers the course.

(b) The Economics Department may permit a third-year major student to take one additional approved course, if a 70% average and a record clear of supplements, repeat courses, etc., has been maintained in the preceding two years.

#### 102 Principles of Economics. Full Course. Staff

A survey of the existing economic order, with particular emphasis on the North American Economy. Concentration is on explaining the operation of the price system as it regulates production, distribution, and consumption, and as it in turn is modified and influenced by private organization and government policy. Consideration is also given to the determination of aggregate economic activity. The main areas studied include: the monetary and banking systems in the United States and Canada; the composition and fluctuations of national income; and the major conditions of economic growth; all as influenced by monetary, fiscal and other policies.  
 Lectures: 3 hours per week for two terms.

#### 202 Principles of Economics. Full Course. Staff

This course is substantially the same as Economics 102. The approach and the emphasis given to particular topics, however, will be more appropriate for upperclass students in Engineering.  
 Lectures: 2 hours per week for two terms.

#### 204 Intermediate Economic Theory. Full Course. Staff

In this course consideration will be given to such topics as: theory and measurement of demand; production functions; cost analysis; price and output policy under various market conditions; factor pricing; income and employment theory.  
 Lectures: 3 hours per week for two terms.

**205 Intermediate Economic Theory (Honours). Full Course.** S. A. Alvi  
Lectures : 3 hours per week for two terms.

**207 Economic Method. Full Course.** A. Vicas  
A study of selected topics in methods of economic analysis, including : the nature of valid arguments, the notion of sets of economic variables, the concept of rational behaviour, differential calculus, game theory, linear programming.  
Lectures : 3 hours per week for two terms.

**301 Economic History. Full Course.** P. V. Mini  
An analysis of the development of Western Europe, Canada and the United States.  
Lectures : 3 hours per week for two terms.

**302 Theories and Processes of Economic Growth and Development. Full Course.** S. A. Alvi  
A consideration of various contributions by economists and others to an understanding of how societies grow and undergo institutional change. The course also includes a study of the problem of accelerating economic growth, with emphasis on selected developing nations of the present time, an analysis of the process of capital formation, the role of the state (in different politico-economic systems), the role of external assistance in economic development, and the economics of investment decisions. Emphasis is also given to the interaction of cultural change and economic development.  
Lectures : 3 hours per week for two terms.

**304 Money, Banking, and Income Theory (Honours). Full Course.** P. V. Mini  
Lectures : 3 hours per week for two terms.

**305 Money, Banking, and Income Theory. Full Course.** Staff  
The functions of money; money and prices; the evolution and kinds of money; the value of money; the supply of money; monetary and banking developments in Canada, the United States and the United Kingdom; the determinants of national income; the multiplier and acceleration principles, monetary and fiscal policy.  
Lectures : 3 hours per week for two terms.

**306 Labour Economics. Full Course.**  
History of the labour movement in Europe, Canada and the U.S.; labour problems; the economics of labour; collective bargaining; case studies; the social teaching of the Church; labour legislation in England, Canada and the United States.  
Lectures : 3 hours per week for two terms.

**308 Applied Statistics. Full Course.** I. J. Masse  
The application of statistical methods to economic problems including curve fitting, trend lines, seasonal variation, the measurement of cyclical fluctuations, correlation and index numbers.  
Lectures : 3 hours per week for two terms.

**312 Comparative Economic Systems. Full Course.** J. M. Dauvergne  
The evolution of economic systems is discussed and evaluated in terms of modern economic theory, and from the point of view of economic efficiency and development.  
Lectures : 3 hours per week for two terms.

**313 Economic Fluctuations. Full Course.** I. J. Masse  
Statistical aspects of the business cycle, the Kitchin, Juglar and Kondratief cycles; monetary, overinvestment, and underconsumption theories of the cycle; Schumpeter's theory; the influence of some strategic factors; an eclectic theory of the cycle; economic growth, policy.  
Lectures : 3 hours per week for two terms.

**407 International Trade. Full Course.** J. M. Dauvergne  
Historical and economic background of international trade; the theory of international trade; balance of payments; international capital movements; foreign exchange; international commercial policies; international organization dealing with commercial theory.  
Lectures : 3 hours per week for two terms.

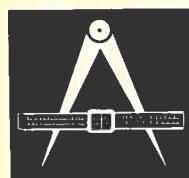
**410 History of Economic Thought. (Honours). Full Course.**  
A critical review of economic thought since Plato and Aristotle.  
Lectures : 3 hours per week for two terms.

**411 Macro-Economic Analysis (Honours). Full Course.** W. J. Carroll  
A critical study of selected topics in Aggregative Economic Analysis.  
Lectures : 3 hours per week for two terms.

**415 Public Finance. Full Course.**  
A study of the principles and practices of public finance, with special reference to Canada.  
Lectures : 3 hours per week for two terms.

**416 Economic Policy. Full Course.** F. J. Hayes  
This course is devoted to examining economic policy in such areas as : business, agriculture, commerce, income redistribution, transportation, social security.  
Lectures : 3 hours per week for two terms.

**417 Operations Analysis and Economic Theory. (Honours). Full Course.** A. Vicas  
Application of mathematical techniques to economic analysis. Topics will include the Calculus, Theory of Determinants, Programming, etc., and their application to selected areas in Economic Theory : Production and Inventory Decisions, Linear Programming, Transportation Problems, Queues, Input - Output Analysis, Game Theory, Econometric Macromodels.  
Lectures : 3 hours per week for two terms.



## engineering

G. W. Joly Associate Dean (Chairman)  
 D.J. McDougal (Sabbatical leave) Associate Professor  
 S. Yalcin (on leave of absence) Associate Professor  
 C. Goldman Associate Professor  
 K. I. Krakow Associate Professor  
 S. J. Kubina Associate Professor  
 Rev. H. Wardell, S.J. Assistant Professor  
 S. A. Neilson Lecturer  
 J. E. Orr Special Lecturer  
 J. B. Philips Special Lecturer

The Faculty of Engineering at this time offers the degree of Bachelor of Science, based on a four year program of studies. Students, who, at the end of their third year wish to complete their course and to achieve an Engineering degree at another university after a further two years of study, will be awarded a Certificate in Engineering if they have completed all the requirements of the first three years.

The courses of the first year and the second year constitute a common program for all students in them, while the courses of the third and fourth years provide specialized work in Chemical, Civil, Electrical and Mechanical Engineering.

Students of the First and Second Year of Engineering are invited to consult the Dean of Engineering or any member of the staff about the specialization in which they expect to engage in the Third and succeeding years.

### promotion

For promotion, an overall average of at least 60% of the weighted marks is required, and at least 50% in each separate examination. A student who fails to achieve promotion and wishes to discuss the possibility of continuing his academic career in the Faculty of Engineering must apply IN WRITING to the Chairman, Engineering, before July 15.

### admissions

The requirements for admission are as follows :

#### Canadian Applicants

##### to first year :

1. For consideration for entry, an applicant must have :
  - a) achieved Junior Matriculation;
  - b) passed 11 papers in June, amongst which must be : English (2 papers), Intermediate Algebra, Trigonometry, Physics, Chemistry;
  - c) achieved an overall average of at least 70% in these 11 papers and a good second class mark in the compulsory ones listed in b) shown.

2. Canadian applicants whose qualifications are different from those above should apply IN WRITING to Loyola College for a review of them.

##### to second year :

1. a) achieved Senior Matriculation;  
 b) passed 10 papers in June, amongst which must be : English (2 papers), French (2 papers), Physics, Chemistry, Analytical Geometry, Calculus;  
 c) achieved an overall average of at least 70% in the 10 papers.
2. Canadian applicants whose qualifications are different from those above should apply IN WRITING to Loyola College for a review of them.
3. If possible, students entering the Senior Matriculation class, should consult with the Associate Dean of Engineering at Loyola about the courses they are following in order to ensure that they will not be deficient to enter Loyola.

#### applicants from abroad

##### to first and second year :

Applicants who consider that their qualifications are equivalent to those specified for Canadian students are invited to submit them to Loyola College for review.

#### First year engineering

COURSE	Course Number	Weighted Mark	Lecture hours per week		Labs. etc. hrs. per week	
			First Term	Second Term	First Term	Second Term
MECHANICS I	001	100	2	2	—	2
ENGINEERING PROBLEMS	101	100	—	—	2	2
ENGINEERING GRAPHICS I	201	100	—	—	3	3
PROFESSIONAL PRACTICE I	301	50	1	1	—	—
CHEMISTRY	101/2	150	3	3	3	3
ENGLISH	101	100	3	3	—	—
FRENCH	120	100	2	2	1	1
CALCULUS	110	100	3	3	—	—
TOTAL :		800	14	14	9	11

**Second year engineering**

COURSE	Course Number	Weighted Mark	Lecture hours per week		Labs. etc. hrs. per week	
			First Term	Second Term	First Term	Second Term
MECHANICS II	002	100	2	2	—	—
ENGINEERING GRAPHICS II	202	100	1	1	2	2
PROFESSIONAL PRACTICE II	302	50	1	1	—	—
**TECHNICAL REPORT I	313	—	—	—	—	—
*SURVEYING	503	—	—	—	—	—
PHYSICAL CHEMISTRY	231	100	3	3	—	—
ALGEBRA	209	100	2	2	—	—
CALCULUS	210	100	3	3	—	—
PHILOSOPHY	—	100	2	2	—	—
THEOLOGY	101	100	2	2	—	—
HEAT LIGHT AND SOUND	201	150	2	2	3	3
MATERIALS SCIENCE I	802	100	2	2	—	—
TOTAL :		1000	20	20	5	5

\*Lectures and Field Work done in May, for Civil Engineers only.  
Counted as part of work of Third Year.

\*\*Prepared in summer following Second Year.  
Counted as part of work of Third Year.

**Third year engineering — Civil**

COURSE	Course Number	Weighted Mark	Lecture hours per week		Labs. etc. hrs. per week	
			First Term	Second Term	First Term	Second Term
**HEAT LIGHT & SOUND	202	100	2	2	—	—
STRENGTH OF MATERIALS I	033	100	2	2	—	—
SYSTEMS ANALYSIS I	103	50	—	—	2	2
NUM. ANAL. & COMPUTATION	133	50	—	—	2	2
*TECHNICAL REPORT	314	100	—	—	—	—
****SURVEYING I	503	100	—	—	—	—
CIRCUIT ANALYSIS	633	100	2	—	3	—
**MATERIALS SCIENCE I	802	100	2	2	—	—
DIFFERENTIAL EQUATIONS	309	100	2	2	—	—
GEOLOGY	402	50	—	3	—	3
ELECTRICITY & MAGNETISM	206	150	2	2	2	2
MECHANICS OF MACHINES	053	50	2	—	3	—
MATERIALS SCIENCE III	813	50	—	—	—	3
***PHILOSOPHY OR THEOLOGY	—	—	—	—	—	—
SURVEYING II	513	50	2	—	2	—
ENGINEERING MATHEMATICS	314	50	2	—	—	—
TOTAL :		1200	18	15	12	12

\*Prepared in summer following Third Year.  
Counted as part of work in Fourth Year.

\*\*For 1966-67.

\*\*\*Not required in 1966-67.

\*\*\*\*Lectures and Field Work done in May.  
Counted as part of work of Third Year.

**Third year engineering — Chemical**

COURSE	Course Number	Weighted Mark	Lecture hours per week		Labs. etc. hrs. per week	
			First Term	Second Term	First Term	Second Term
**HEAT LIGHT AND SOUND	202	100	2	2	—	—
STRENGTH OF MATERIALS I	033	100	2	2	—	—
NUMER. ANAL. & COMPUTATION	133	50	—	2	—	2
*TECHNICAL REPORT II	314	100	—	—	—	—
CHEMICAL ENG. PRINCIPLES	403	100	2	2	2	2
CIRCUIT ANALYSIS	633	100	2	—	3	—
DIFFERENTIAL EQUATIONS	309	100	2	2	—	—
INORGANIC CHEMISTRY	211	50	1	1	—	—
ORGANIC CHEMISTRY	221	100	3	3	—	—
PHYS. CHEM. LAB.	333	100	—	—	4	4
ENGINEERING MATHEMATICS	314	50	2	—	—	—
ELECTRICITY & MAGNETISM	206	150	2	2	2	2
TOTAL :		1100	18	16	11	10

\*Prepared in summer following Third Year.  
Counted as part of work in Fourth Year.

\*\*For 1966-67 only.

**Third year engineering — Electrical**

COURSE	Course Course	Weighted Mark	Lecture hours per week		Labs. etc. hrs. per week	
			First Term	Second Term	First Term	Second Term
MODERN PHYSICS	407	50	3	—	—	—
STRENGTH OF MATERIALS I	033	100	2	2	—	—
SYSTEMS ANALYSIS I	103	50	—	—	2	2
NUM. ANAL. & COMPUTATION	133	50	—	2	—	2
*TECHNICAL REPORT II	314	100	—	—	—	—
CIRCUIT ANAL. & ENER. CONV.	623	150	2	2	3	3
**MATERIALS SCIENCE I	802	100	2	2	—	—
DIFFERENTIAL EQUATIONS	309	100	2	2	—	—
ELECTRICITY & MAGNETISM	206	150	2	2	2	2
MATERIALS SCIENCE III	813	50	—	—	2	2
**HEAT LIGHT & SOUND	202	150	2	2	—	—
***PHILOSOPHY OR THEOLOGY	—	100	—	—	—	—
ENGINEERING MATHEMATICS	314	50	2	—	—	—
TOTAL :		1200	17	14	7	12

\*Prepared in summer following Third Year.  
Counted as part of work in Fourth Year.

\*\*For 1966-67 only.

\*\*\*Not required in 1966-67.

## Third year engineering — Mechanical

COURSE	Course Number	Weighted Mark	Lecture hours per week		Labs. etc. hrs. per week	
			First Term	Second Term	First Term	Second Term
MECHANICAL DESIGN	203	50	—	—	—	3
STRENGTH OF MATERIALS I	033	100	2	2	—	—
SYSTEMS ANALYSIS I	103	50	—	—	2	2
NUMERICAL ANAL. & COMPUT.	133	50	—	2	—	2
*TECHNICAL REPORT II	314	100	—	—	—	—
CIRCUIT ANALYSIS	633	100	2	—	3	—
**MATERIALS SCIENCE I	802	100	2	2	—	—
DIFFERENTIAL EQUATIONS	309	100	2	2	—	—
ELECTRICITY & MAGNETISM	206	150	2	2	2	2
MECHANICS OF MACHINES	053	50	2	—	3	—
MATERIALS SCIENCE II	803	100	1	—	3	3
***PHILOSOPHY OR THEOLOGY	100	—	—	—	—	—
EXPERIMENTAL METHODS	713	50	—	1	—	2
**HEAT LIGHT & SOUND	202	100	2	2	—	—
ENGINEERING MATHEMATICS	314	50	2	—	—	—
TOTAL :		1250	17	13	13	14

\*Prepared in summer following Third Year.

Counted as part of work in Fourth Year.

\*\*For 1966-67 only.

\*\*\*Not required in 1966-67.

## Fourth year engineering — Civil

COURSE	Course Number	Weighted Mark	per week Lecture hours		Labs. etc. hrs. per week	
			First Term	Second Term	First Term	Second Term
EXPERIMENTAL METHODS	713	50	—	1	—	2
**ENGINEERING MATHEMATICS	314	50	2	—	—	—
FLUID MECHANICS I	104	50	—	2	—	—
COMPUTER METHODS	134	50	1	—	2	—
**MATERIALS SCIENCE II	803	100	1	1	3	3
**HEAT LIGHT AND SOUND	201	150	2	2	3	3
ECONOMICS	202	100	2	2	—	—
TECHNICAL REPORTS	314	100	—	—	—	—
STRUCTURAL & MECH. DESIGN	214	100	2	2	3	3
**MECHANICS OF MACHINES	053	50	2	—	3	—
*PHILOSOPHY	100	—	—	—	—	—
*THEOLOGY	100	—	—	—	—	—
***ELECTIVES						
SURVEYING II	513	50	2	—	2	—
TOTAL :		1050	14	10	16	11

\*Not required for 1966-67.

\*\*For 1966-67 only.

\*\*\*Electives from Engineering, Science and/or Arts courses to be chosen, with the approval of the Faculty of Engineering, to suit the specific requirements of each student. (Not required in 1966-67).

## Fourth year engineering — Electrical

COURSE	Course Number	Weighted Mark	Lecture hours per week		Labs. etc. hrs. per week	
			First Term	Second Term	First Term	Second Term
**MODERN PHYSICS	407	50	3	—	—	—
**ENGINEERING MATHEMATICS	314	50	2	—	—	—
FLUID MECHANICS I	014	50	—	2	—	—
COMPUTER METHODS	134	50	1	—	2	—
**MATERIALS SCIENCE II	803	100	1	1	3	3
**HEAT LIGHT AND SOUND	201	150	2	2	3	3
ECONOMICS	202	100	2	2	—	—
TECHNICAL REPORTS	314	100	2	2	—	—
FUNC. OF COMPLEX VARIABLES	315	50	—	2	—	—
*PHILOSOPHY	100	—	—	—	—	—
*THEOLOGY	100	—	—	—	—	—
***ELECTIVES						
TOTAL :		900	13	11	8	6

\*Not required for 1966-67.

\*\*For 1966-67 only.

\*\*\*Elective from Engineering, Science and/or Arts courses to be chosen, with the approval of the Faculty of Engineering, to suit the specific requirements of each student.

## Fourth year engineering — Mechanical

COURSE	Course Number	Weighted Mark	Lecture hours per week		Labs. etc. hrs. per week	
			First Term	Second Term	First Term	Second Term
EXPERIMENTAL METHODS	713	50	—	—	1	2
**ENGINEERING MATHEMATICS	314	50	2	—	—	—
FLUID MECHANICS I	104	50	—	2	—	—
COMPUTER METHODS	134	50	1	—	2	—
**MATERIALS SCIENCE II	803	100	1	1	3	3
**HEAT LIGHT AND SOUND	201	150	2	2	3	3
ECONOMICS	202	100	2	2	—	—
TECHNICAL REPORTS	314	100	—	—	—	—
STRUCTURAL & MECH. DESIGN	214	100	2	2	3	3
**MECHANICS OF MACHINES	053	50	2	—	3	—
*PHILOSOPHY	100	—	—	—	—	—
*THEOLOGY	100	—	—	—	—	—
***ELECTIVES						
TOTAL :		1000	12	10	14	11

\*Not required for 1966-67.

\*\*For 1966-67.

\*\*\*Electives from Engineering, Science and/or Arts courses to be chosen, with the approval of the Faculty of Engineering to suit the specific requirements of each student. (Not required in 1966-67).

**APPLIED MECHANICS****001 Mechanics I.**

G. W. Joly

Position, velocity and acceleration of a rigid body executing plane motion. Relative motion. A preliminary study of the dynamics of curvilinear plane motion in order to establish the principles of center of gravity and moment of inertia, followed by a development of these ideas in depth. So as to prepare the student for the later presentation of static equilibrium as a special case of dynamics, Mechanics I commences with the intuitional view of the conditions of static equilibrium through a study of simple space frames. The vector approach is used freely.

Lectures : 2 hours per week, both terms.  
Problems : 2 hours per week, second term.

**002 Mechanics II.**

The three general approaches to dynamics : torque and inertia-acceleration, work and kinetic energy, impulse and momentum. The selection of the appropriate general approach in each problem is emphasized and numerical results are expected. Forces in rotating bodies. Gyroscopes. The vector approach is used freely.

Lectures : 2 hours per week, both terms.

**014 Fluid Mechanics I.**

K. I. Krakow

Properties of fluids; hydrostatics; incompressible flow; continuity, conservation of momentum, conservation of energy, measurement of flowrate; concept of laminar and turbulent flow; flow in pipes; open channel flow.

Lectures : 2 hours per week, second term.

**033 Strength of Materials I.**

C. Goldman

Elastic Theory of matter; axial, thermal and bending stresses; combined stress, tension, deflection of beams by differential equation of elastic line, moment area, superposition and conjugate beam methods; statically indeterminate beams; energy of strain; introduction of photostress analysis and theory of models.

Lectures : 2 hours per week for both terms.

**053 Mechanics of Machines.**

K. I. Krakow

Analytical and graphical velocity, acceleration and force analysis of mechanisms; static and dynamic balancing of rotating and reciprocating mechanisms; design of cams, gears, gear trains.

Lectures : 2 hours per week, first term.  
Problems : 3 hours per week, first term.

**ENGINEERING ANALYSIS****101 Engineering Problems.**

G. W. Joly

This course is the complement of the lectures in the Mathematics of First Year and seeks to unite the theory and practice of Mathematics as related to Engineering. Problems are set up and solved by the student himself.

Lectures : 2 hours problems per week for two terms.

**103 Systems Analysis I.**

K. Krakow

The application of Mathematics to the solutions of Civil, Electrical and Mechanical Engineering problems.  
Text : Haberman, C. M. — *Engineering Systems Analysis*.  
Lectures : 2 hours problems per week, both terms.

**133 Numerical Analysis and Computation Methods.**

S. Kubina

An introduction to Digital Computer Programming and associated methods of numerical analysis useful in the solution of engineering problems. Laboratory periods are devoted to the solution of problems using mechanical calculating machines and IBM 1620 Computer.

Lectures : 2 hours per week, one term.  
Computer Lab. : 2 hours per week, one term.

**134 Computer Methods.**

S. Kubina

Advanced FORTRAN programming ; numerical methods for the solution of engineering problems.  
Lectures : 1 hour per week, one term.  
Lab : 2 hours per week, one term.

**ENGINEERING DESIGN.****201 Engineering Graphics I.**

H. Wardell

Orthographic projection, auxiliary and oblique views, dimensioning, sectioning. Geometrical construction of ellipses, hyperbolas, cycloids, involutes, etc. Pictorial drawings including isometric, oblique. Common machine elements; screws, welding, structural shapes. Free-hand sketching, working and assembly drawings.

Lectures : 1 hr. per week for two terms.  
Lab : 2 hrs. per week for two terms.  
Text : French, *Engineering Drawing*, McGraw-Hill.

**202 Engineering Graphics II.**

H. Wardell

Theory of orthographic projection, auxiliary views, lines, planes, intersections, dihedral angles, parallelism, perpendicularity, revolution, developments, mining and civil engineering problems involving principles covered in the course.

Lectures : 1 hour per week for two terms.  
Lab : 2 hrs. per week for two terms.  
Text : *Descriptive Geometry*. Paré-Loving-Hill.

**203 Mechanical Design.**

K. I. Krakow

Mechanical design involving elementary stress analysis; relation between design and manufacturing techniques, presentation of design briefs.

Problems : 3 hours per week, 2nd term.

**214 Structural and Mechanical Design**

C. Goldman

Analysis and design of members, machine elements, steel, timber, connections. Elastic and plastic design.

Lectures : 2 hours per week, both terms.  
Problems : 3 hours per week, both terms.

**PROFESSIONAL PRACTICE.****301 Professional Practice I.**

S. A. Neilson

Use of English, both oral and written in engineering practice, mechanics of presentation, graphical representation, reproduction methods, job applications; specifications.  
Lecture : One hour per week, both terms.

**302 Professional Practice II.**

S. A. Neilson

Continuation of Course 301 with emphasis on Public Speaking — Conference Techniques, etc.  
Lectures : 1 hour per week, both terms.

**313 Technical Report I.**

S. A. Neilson

Students entering the Third Year of Engineering must submit a Technical Report. The most suitable subject for the Report is a topic drawn from the experience during his summer work. If, however, a student's summer experience does not provide a reasonable topic, he may visit and inspect any engineering, scientific or industrial project in course of construction or operation, and write upon his observations. The Report should be between 2000 and 4000 words in length and must be handed in not later than Registration Day.

**314 Technical Report II.**

S. A. Neilson

Students entering the Fourth Year of the Engineering course must submit a Technical Report, similar to 313 which in this case should be between 3000 and 5000 words in length. This Report must be handed in on Registration Day.

**CHEMICAL ENGINEERING.****403 Chemical Engineering Principles.**

J. B. Phillips

Application of physical and chemical principles to some fundamental problems in Chemical Engineering.  
Lectures : 2 hrs. per week, both terms.  
Lab. : 2 hrs. per week, both terms.

**CIVIL ENGINEERING****503 Surveying I.**

## a) Theory (24 lectures in May).

Measurements of distances, elevations, angles. Traverses and computation of areas. Stadia measurements. Errors.

## b) Field School (in May).

Use and care of surveying instruments. Tape measurements and traverse work. Rod and level exercises. Transit and tape measurements. Grid and Area computations. Stadia work and map project. Circular curves.

**513 Surveying II.**

C. Goldman

Route surveys involving simple, transition and vertical curves. Grades, cross sections, earth-work computations. Principles of field astronomy. Triangulation. Hydrographic surveying. Use of planimeter and aerial photographs in surveying work.

Lectures : 2 hours per week, 1st term.

Problems : 2 hours per week, 1st term.

**ELECTRICAL ENGINEERING.****623 Circuit Analysis and Energy Conversion.** S. Kubina

The fundamentals of the analysis of linear circuits to study, time varying, periodic and non-periodic currents, and voltages; node and loop analysis; network theorems; time frequency domain relationships; polyphase circuits; Fourier series, Laplace transforms; introduction to electro mechanical energy conversion and rotating electrical machines.

Lectures : 2 hours per week, two terms.  
Lab : 3 hours per week, two terms.

**633 Circuit Analysis.**

S. Kubina

Analysis of the response of linear circuits to steady and time varying currents and voltages; node and loop analysis; network theorems; Laplace transforms; poly-phase circuits.  
Lectures : 2 hours per week, one term.  
Lab : 3 hours per week, one term.

**MECHANICAL ENGINEERING.****713 Experimental Engineering.**

K. I. Krakow

Theory and use of instruments; measurement of temperature, pressure, fluid flow, power; analysis of combustion products.  
Lecture : 1 hour per week, second term.  
Lab. : 2 hours per week, second term.

**MATERIALS SCIENCE.****802 Material Science I.**

J. E. Orr

A systematic approach to the study of properties and behaviour of engineering materials including, the fundamental properties of materials, metallic phases, multiphase materials, structural effects on properties, stability under service stresses; thermal, electrical, chemical properties and corrosion; organic and non-metallic materials.

Lectures : 2 hours per week for two terms.

**803 Materials Science II.**

K. I. Krakow

H. Wardell, C. Goldman

A theoretical and experimental study of metallic and non-metallic materials, their properties and processes used to control and alter their properties, their mechanical behaviour and experimental techniques used in investigating their behaviour, and the relation between mechanical behaviour and the physical and chemical properties of materials. Introduction to destructive and non-destructive testing using strain gauge and photo stress techniques.

Lectures : 1 hour per week, 1st term.  
Lab. : 3 hours per week for both terms.

**813 Materials Science III.**

C. Goldman

That part of Materials Science II relating to Strength of Materials.

Lab. : 3 hours per week, 2nd term.



## english

A. G. Hooper Professor (Chairman)  
 M. Blanar Associate Professor  
 Rev. G. MacGuigan, S.J. Associate Professor  
 S. C. Russell Associate Professor  
 A. Newell Assistant Professor  
 A. Raff Assistant Professor  
 A. N. Raspa Assistant Professor  
 J. T. Rooney Assistant Professor  
 R. S. Wareham Assistant Professor  
 K. Waters Assistant Professor  
 J. Anderson Lecturer  
 R. M. Simmons Lecturer

### Courses leading to an Honours B.A. in English.

FIRST YEAR	SECOND YEAR	THIRD YEAR	FOURTH YEAR
Classics 102 or 111 or 112 or 121	Classics 112 or 202 or 212 or 221	ENGLISH 130, 250, 260, 520	ENGLISH 120, 160, 230
ENGLISH 101	ENGLISH 360, 440 and 520	Philosophy Theology	Philosophy Elective (1)
French	French		
History 101			
Mathematics 101 or Science 101	Philosophy		
Theology	Theology		

### Courses leading to a B.A. with a Major in English.

FIRST YEAR	SECOND YEAR	THIRD YEAR	FOURTH YEAR
Classics 102 or 111 or 112 or 121	Classics 112 or 202 or 212 or 221	ENGLISH 253 and 273	ENGLISH 134 and 244
ENGLISH 101	ENGLISH 342 and 362	Philosophy Theology	Philosophy Electives (2)
French	Electives (1)		
History 101	from 232, 292		
Mathematics 101 or Science 101	French Philosophy		
Theology	Theology Elective (1)		

### 101 First Year. Full Course

M. Blanar and Instructors

English literature and composition, with private tutorials.  
 Texts : Selected paperbacks.  
 Lectures : 3 hours per week for two terms.

### 110 Chaucer. Full Course. (not offered in 1966-67)

### 120 Spenser and his Background. Full Course. For Fourth Year Honours Students.

R. S. Wareham

Spenser's works, in particular *The Shephearde's Calender* and *The Faerie Queene*; the background of Elizabethan politics, religion, ethics, psychology, and literary theory; the influence of Courtly Love, Humanism, and Neoplatonism; the traditions of pastoral, epic, romance, and allegory.  
 Lectures : 3 hours per week for two terms.

### 130 Shakespeare. Full Course. For Third Year Honours Students.

A. Newell

Shakespeare's plays — histories, tragedies, comedies — will be studied in relation to the Elizabethan theater and its tradition; the social, historical, and literary setting; Shakespeare's development as a dramatic artist; the body of Shakespearian criticism. An emphasis will be placed on appreciating each play as an individual creation.

Lectures : 3 hours per week for two terms.

### 134 Shakespeare. Full Course. For Fourth Year Students majoring in English.

A. Newell

Lectures : 3 hours per week for two terms.

### 140 Milton. Full Course. (not offered in 1966-67)

### 150 Dryden and Pope. Full Course. (not offered in 1966-67)

### 160 Swift and Johnson. Full Course. For Fourth Year Honours Students.

M. Blanar

A study of *satire* and Swift's major and minor works; neoclassicism, Boswell's *Life of Johnson* and selections from Johnson's works.

Lectures : 3 hours per week for two terms.

### 220 Medieval and Renaissance Literature. Full Course. (not offered in 1966-67)

### 230 The Seventeenth Century. Full Course. For Fourth Year Honours Students.

A. N. Raspa

This course deals with the prose styles in the century as represented by Bacon, Browne and Donne, and with the poetry and poetic theory of the major Metaphysicals, Jonson and Milton.

Lectures : 3 hours per week for two terms.

### 232 The Earlier Seventeenth Century. Full Course. Open to Second Year Students majoring in English.

A. N. Raspa

A survey of the literature of the period bounded roughly by the years 1600 and 1660, dealing principally with the poetry of Milton and the Metaphysicals, and selections from the works of the major prose stylists.

Lectures : 3 hours per week for two terms.

### 240 Restoration and Eighteenth-Century Literature. Full Course. (not offered in 1966-67)

### 244 Eighteenth-Century Literature. Full Course. For Fourth Year Students majoring in English.

J. Anderson

Lectures : 3 hours per week for two terms.

### 247 Eighteenth-Century Literature. Full Course. Open to Second Year General Arts Students.

J. Anderson

Lectures : 3 hours per week for two terms.

- 250 English Romantic Poetry. Full Course. For Third Year Honours Students.** S. C. Russell  
Blake, Wordsworth, Coleridge, Keats and Shelley will be studied in detail, with special emphasis on the development of their thought and art as expressive of the changing philosophic and literary values of the period.  
Lectures : 3 hours per week for two terms.
- 253 The English Romantic Period. Full Course. For Third Year Students majoring in English.** S. C. Russell  
A survey of the major writers, including Wordsworth, Coleridge, Byron, Keats, Shelley, Lamb and Hazlitt. The course will deal with the development of the Romantic outlook as expressive of the changing views of man, nature and society.  
Lectures : 3 hours per week for two terms.
- 260 Thought and Literature in Nineteenth-Century England. Full Course. For Third Year Honours Students.** J. Rooney  
The course is designed as an introduction to some of the major intellectual and social trends affecting literature in nineteenth-century England. It will be based upon a critical study of works by Jane Austen, S. T. Coleridge, Wordsworth, Mill, Newman, Carlyle, Arnold, George Eliot, and others.  
Lectures : 3 hours per week for two terms.
- 273 Nineteenth-Century Literature. Full Course. For Third Year Students majoring in English.** A. Raff  
Victorian poetry, with emphasis on Tennyson, Browning, Arnold, and Hopkins, and the following novels: *Jane Eyre*, *Bleak House*, *Cranford*, *Barchester Towers*, *Middlemarch*, and *Tess of the d'Urbervilles*.
- 277 Nineteenth-Century Literature. Full Course. Open to Second Year General Arts Students.** A. Raff  
Major Victorian poetry and fiction.  
Lectures : 3 hours per week for two terms.
- 280 Modern Literature. Full Course. (not offered in 1966-67)**
- 287 Twentieth-Century British Literature. Full Course. Open to Second Year General Arts Students.** K. Waters  
Among the texts studied are works by Butler, Wilde, Shaw, Yeats, Conrad, Eliot, Bennett, Lawrence, Joyce, Forster, Woolf, Huxley. Emphasizing the nature and quality of the imaginative experience of the works themselves, the course will consider also their relationship to prevailing and developing cultural theories, and associated literary movements.  
Lectures : 3 hours per week for two terms.
- 289 Twentieth-Century Readings. Full Course. For Fourth Year Arts Students majoring in Biology-Chemistry.** A. N. Raspa  
The course is designed to familiarize the student with some of the themes and forms of the modern novel, principally English, and includes discussion of some continental writers.  
Lectures : 3 hours per week for two terms.

- 292 Twentieth-Century Literature, British and American. Full Course. Open to Second Year Students majoring in English.** R. M. Simmons  
Lectures : 3 hours per week for two terms.
- 297 Twentieth-Century Literature. British and American. Full Course. Open to Second Year General Arts Students.** R. M. Simmons  
Lectures : 3 hours per week for two terms.
- 299 Twentieth-Century Literature, British and American. Full Course. For Fourth Year Commerce Students majoring in Economics.** R. M. Simmons  
Lectures : 3 hours per week for two terms.
- 337 Elizabethan and Jacobean Drama. Full Course. Open to Second Year General Arts Students.** A. G. Hooper  
Selected plays by Marlowe, Kyd, Thomas Heywood, Shakespeare, Webster, Ford.  
Lectures : 3 hours per week for two terms.
- 342 The Nineteenth-Century Novel (English and American). Half Course. For Second Year Students majoring in English.** J. Rooney  
This course will emphasize comparative analysis of works from both traditions : Jane Austen, J.F. Cooper, Emily Bronte, Charles Dickens, Nathaniel Hawthorne, W. M. Thackeray, Herman Melville, George Eliot, Mark Twain, Henry James, Joseph Conrad.  
Lectures : 3 hours per week for one term.
- 347 The Nineteenth-Century Novel (English and American). Full Course. Open to Second Year General Arts Students.** J. Rooney  
Lectures : 3 hours per week for two terms.
- 359 The English Novel. Full Course. For Fourth Year Students in Accounting.** A. Raff  
Representative works by major English novelists from Defoe to Conrad.  
Lectures : 3 hours per week for two terms.
- 360 Poetry. Full Course. For Second Year Honours Students.** K. Waters  
Lectures : 3 hours per week for two terms.
- 362 Poetry. Half Course. For Second Year Students majoring in English.** K. Waters  
The course attempts to understand the nature of poetry and poetic experience, and to examine the elements of a poem (broadly, language, rhythm and structural design), by practical

analysis, criticism, comparison, and class discussion of a number of poems (most of them short). A central anthology, together with supplementary paperbacks of poetry and of commentary, will be used.  
Lectures : 3 hours per week for one term.

**377 Literature, Ideas and Myths. Full Course. A course for General Arts Students.** R. S. Wareham

Texts : *The Epic of Gilgamesh* (Penguin). *The Prophecy of Isaias*, Chapters 1-6. *The Republic of Plato* (Oxford). Wolfram von Eschenbach, *Parzival* (Vintage). Shakespeare, *King Lear* (Washington Square Press). Milton, *On the Morning of Christ's Nativity*. Blake (Dell). Melville, *Moby Dick* (Bobbs-Merrill). *Manifesto of the Communist Party* (International Publishers). Dostoevski, *The Grand Inquisitor on the Nature of Man* (Bobbs-Merrill). Ray Bradbury, *Fahrenheit 451* (Ballantine). Twentieth Century Engineering (Museum of Modern Art).

Lectures : 3 hours per week for two terms.

**391 For Fourth Year Arts Students majoring in Economics.** J. Anderson

**410 The English Language. Half Course. (not offered in 1966-67)**

**420 Anglo-Saxon Language and Literature. Half Course. (not offered in 1966-67)**

**430 Middle English Language. (not offered in 1966-67)**

**440 Advanced Prose Composition. Half Course. For Second Year Honours Students.** G. MacGuigan

A theoretical and practical study of prose style to make the student familiar with and competent in the use of the main prose traditions. A reading of treatises on style from Aristotle and Longinus to the present time is required.

Texts :: Aristotle, *Rhetoric*. Weaver, *The Ethics of Rhetoric*. Auerbach, *Mimesis*. Whately, *Elements of Rhetoric*. Donnelly, *Persuasive Speech*. Read, *English Prose Style*. Whitehall, *Structural Elements of English*. Other selections to be announced.

Lectures : 2 hours per week for two terms.

**510 Literary Criticism. Full Course. (not offered in 1966-67)**

**520 Practical Criticism. Full Course. For Second and Third Year Honours Students.** A. G. Hooper

Lectures : 2 hours per week over two years.

**610 Canadian Literature. Half Course. (not offered in 1966-67)**

**627 American Literature. Full Course. Group A. Open to Second Year General Arts Students.** S. C. Russell

A study of the development of the American tradition in literature, with emphasis on the major writers, including Emerson, Thoreau, Hawthorne, Melville, Whitman, Emily Dickinson, Mark Twain, Henry James, Fitzgerald, Hemingway, Faulkner, and T. S. Eliot.

Lectures : 3 hours per week for two terms.

**628 American Literature. Full Course. Group B. Open to Second Year General Arts Students.** A. Newell

The growth of American literature in its various forms will be surveyed in relation to regional, sociological, ideological, literary and other forces that enter into the emerging patterns of American literature and culture. The best writings from colonial times to the present will be read.

Lectures : 3 hours per week for two terms.

**french studies**



A. Lauzière	Professor (Chairman)
G. Labbé	Professor
P. Toupin,	Associate Professor
Rev. A. Nelson, S.J.	Associate Professor
M. Andersen	Assistant Professor
P. Gagnon-Leduc	Assistant Professor
G. Andersen	Assistant Professor
C. Rouben	Assistant Professor
J. Makriss	Lecturer
D. Lévy	Lecturer
A. Murphy	Lecturer
L. Sugden	Lecturer
E. Rioux	Lecturer
Z. Youssef	Lecturer
M. Catry	Lecturer
O. Rigault	Lecturer
M. Tiffou	Lecturer
N. Truchon	Lecturer
C. Fox	Lecturer
M. Pavitt	Lecturer
D. Yates	Lecturer
A. Berthiaume (on study leave)	Lecturer

**PART-TIME TEACHERS :**

Udo Sautter	Assistant Professor
Edma Ottolenghi	Lecutrer
John Costa	Lecturer
Henri Eltz	Sessional Lecturer
Alain Bartho	Sessional Instructor
Gilbert Mongenot	Sessional Instructor
R. Dolinsky	Technician Language Lab.

**P R E A M B L E**

A first year course in French (on one of five levels: F-100, 120, 124, 128 or 130) is a prerequisite for any further courses in French. The level of the students is to be ascertained by means of a placement test which is *compulsory for all students* coming to Loyola for the first time. Normally, the test is taken on the 7th and the 8th of September. The student must then register in the course level indicated by the Department. All required textbooks must be purchased during the week that lectures begin, but only when students have received confirmation of their course level on the basis of the placement test. All students are strongly urged to buy Harrap's Shorter French and English Dictionary for language courses and Quillet's Dictionary for literature courses.

Students proceeding to the B.Sc., are required to take only the first year course in French. Those proceeding to the B.Com. and those proceeding to the B.A., but who do not select French as an area of concentration (major) or specialization (Honours), are required to take two French language courses, but may be permitted to take French literature instead, depending on their knowledge of the language. Finally, those proceeding to a B.A., who select to major or to honour in French, shall take two language courses in their 3rd and 4th years, F-328 and F-428, and any of 6 (major) or 8 (honors) literature courses.

All courses are conducted in French. There is a limit of 25 students per section in any given language course. The teaching is based more and more on the new discipline of Applied Linguistics which affords an up-to-date dynamic methodology in language teaching. The Language Laboratory is a valued auxiliary means with modern scientific teaching facilities. Students in some 1st and 2nd year courses will attend laboratory sessions on a compulsory basis; other students may be required to attend similar sessions at the request of their professors. The Department will promote the use of other audio-visual means and methods (such as V.I.F. *Voice et Images de France*). Term work is worth 50 to 60% of the final mark.

The Department aims at more than sound progress in speaking and writing French fluently; it strives to create a life-like atmosphere in and out of class.



LANGUAGE LABORATORY

**Courses leading to a B.A. with a Major in French.**

FIRST YEAR	SECOND YEAR	THIRD YEAR	FOURTH YEAR
Classics 102 or 111 or 112 or 121	Classics 112 or 202 or 212 or 221	FRENCH Electives (2) from 330, 340 or 360	FRENCH 428 FRENCH 430 FRENCH 450 Philosophy Elective (1)
English 101	English		
FRENCH 124, 128 or 130	FRENCH 224, 228 or 230		
Mathematics 101 or Science 101	Philosophy Theology	Philosophy Theology	
Theology 101	Elective (1)	Theology	
	Elective (1)		

**Courses leading to an Honours B.A. in French.**

FIRST YEAR	SECOND YEAR	THIRD YEAR	FOURTH YEAR
Classics 102 or 111 or 112 or 121	Classics 112 or 202 or 212 or 221	FRENCH 328 FRENCH	FRENCH 428 FRENCH (2)
English 101	English	ELECTIVES (3) from 260H **	440 and 450
FRENCH 128 or 130	FRENCH	ELECTIVES (2) 330H, 340H, 360 or 365	Philosophy Elective (1)*
Mathematics 101 or Science 101	from 228, 230, 240,	Philosophy	
Theology 101	250 or 260H	Theology	
Elective (1)*	Philosophy Theology		

\*\* If a non-elective in second year.

\* Preferably Spanish, German or Italian.

**100 Language : Basic French.**

D. Yates

Essentials of phonetics and grammar with emphasis on audio-lingual skills. A lecture and laboratory course for foreign students only.

Three hours per week for two terms.

**120 Language : Intermediate French.** M. Pavitt & Staff

Study of spoken and written patterns. Phonetics, grammar, composition and prescribed readings. A lecture and laboratory course for students who have some knowledge of written but little or no practice in oral French.

Three hours per week for two terms.

**124 Language : Fluent normative French.**

C. Rouben &amp; Staff

Spoken and written patterns. Phonetics, structural grammar, composition and selected readings. A lecture and laboratory course for students who have completed successfully four years of High School French.

Three hours per week for two terms.

**128 Language : Advanced French.** Z. Youssef & Staff

Concentration on spoken and written patterns. Corrective phonetics, review of structural grammar, oral and written composition. Discussion on selected readings, some *explication de textes*. A lecture and part-time laboratory course for students who have a good knowledge of French.

Three hours per week for two terms.

**130 Literature.**

G. Labb   & Staff  
 Initiation    la litt  rature fran  aise : analyse d'une quinzaine de textes choisis. Genres et mouvements litt  raires. Technique de l'analyse litt  raire et de la dissertation. S  ances de travaux pratiques. A literature survey course for freshmen who have a sound French schooling background of some ten years or its equivalent.  
 Three hours per week for two terms.  
 Texts : Lagarde et Michard, *XIXe si  cle et XXe si  cle*.  
*Classiques* Bordas et Didier  
 Grevisse, M., *Pr  cis de grammaire fran  aise*.  
 Quillet, *Dictionnaire usuel*.

**200 Language**

D. Yates  
 Functional grammar, conversation and composition. A lecture and laboratory course. Prerequisite : French 100.  
 Three hours per week for two terms.

**220 Language.**

G. Andersen & Staff  
 Continued emphasis on spoken French. Corrective phonetics, structural grammar in a given context, composition and selected readings. A lecture and part-time laboratory course. Prerequisite : French 120 or equivalent in Departmental test.  
 Three hours per week for two terms.

**224 Language.**

A. Nelson & Staff  
 Corrective phonetics, contextual syntax and idiomatic French. Contemporary readings illustrating French life here and abroad with discussion and composition thereon. A lecture course with sessions of a practical nature.  
 Prerequisite : French 124 or equivalent in Departmental test.  
 Three hours per week for two terms.

**228 Language and Civilization.**

P. Leduc & Staff

Introduction to comparative stylistics. Vocabulary expansion by word formation and derivation, by synonymy and idiomatic structures. Oral and written composition through readings and relia of French Canadian civilization. A lecture and practice course.  
 Prerequisite : French 128 or equivalent in Departmental test.  
 Three hours per week for two terms.

**230 Litt  rature : le Moyen-Age.**

Oeuvres   piques, courtoises, satiriques, narratives et lyriques. Th  tre religieux et comique. Pr  requis : le cours F.130 ou la permission du directeur de d  partement.  
 Le  ons et s  ances de travaux pratiques : 3 h. par semaine.  
 Textes : *la Chanson de Roland, Tristan et Iseut, Le Roman de Renart, le miracle de Th  ophile, la farce de maître Pathelin* ; Villon, *le Grand Testament* ; Lagarde et Michard, *Moyen-Age* ; Quillet, *Dictionnaire usuel*.  
 (Ce cours ne se donnera pas en 1966-67).

**240 Litt  rature : La Renaissance et le XVIe Si  cle.**

P. Toupin, Directeur, A. Nelson, A. Murphy  
 L'humanisme fran  ais. Po  sie et prose : les origines, l'  volution et les oeuvres ma  tresses. Pr  requis : le cours F.130 ou la permission du directeur de d  partement.  
 Le  ons et s  ances de travaux pratiques : 3 h. par semaine.  
 Textes : Rabelais, *Gargantua et Pantagruel*; Montaigne, *les Essais*; du Bellay, *Regrets*; Ronsard, *les Amours*, D'Aubign  , *les Tragiques* (livre VII : *Jugement*). Lagarde et Michard, *le XVIe Si  cle*; Quillet, *Dictionnaire usuel*.

**250 Litt  rature : le XVIIe Si  cle ou le Classicisme fran  ais.**

A. Lauzi  re, Directeur, J. Makriss, D. L  vy  
 L'esprit classique. L'honn  te homme. Moralistes, auteurs dramatiques, romanciers. Pr  requis : le cours F.130 ou la permission du directeur de d  partement.  
 Le  ons et s  ances de travaux pratiques : 3 h. par semaine.  
 Textes : Pascal, *les Pens  es*; Boileau, *l'Art po  tique*; La Bruy  re, *les Caract  res*; La Rochefoucauld, *Maximes*; La Fontaine, *les Fables*; Bossuet, *Oraison fun  bre de Cond  e*; La Fayette, *la Princesse de Cl  ves*; Corneille, *Horace*; Racine, *Andromaque*; Moli  re, *Dom Juan*. Lagarde et Michard, *XVIIe Si  cle*.

**260H Litt  rature : le XVIIIe Si  cle ou le Si  cle des lumi  res.**

C. Rouben  
 R  gne de la raison et r  veil de la sensibilit  .  
 Pr  requis : le cours F.130 ou la permission du directeur de d  partement.  
 Le  ons et s  ances de travaux pratiques : 3 h. par semaine.  
 Textes : Lesage, *Gil Blas*; Marivaux, *le Paysan Parvenu*; Pr  vost, *Manon Lescaut*; Montesquieu, *Lettres Persanes*; Voltaire, *Lettres philosophiques, Zadig, Candide, l'Encyclop  die*; Diderot, *le Neveu de Rameau*; Rousseau, *Confessions, Emile*; Lagarde et Michard, *le XVIIIe Si  cle*; Quillet, *Dictionnaire usuel*.

**328H Langue : stylistique et cr  ation litt  raire.**

P. Toupin  
 Introduction    la stylistique. Travaux de cr  ation litt  raire. Analyse stylistique de textes litt  raires. Stylistique compar  e du fran  ais et de l'anglais. Pr  requis : le cours F.228 ou la permission du directeur de d  partement. Cours obligatoire pour tout   tudiant inscrit    une sp  cialisation fran  aise (major ou honours) : 3 h. par semaine.  
 Textes : Courault, *L'art d'  crire* (2 tomes) Vinay et Darbelnet, *Stylistique compar  e du fran  ais et de l'anglais*; Harrap, *Shorter French and English Dictionary*.

**330H Litt  rature : le roman fran  ais au XIXe Si  cle.**

M. Andersen  
 Evolution et   tude d'oeuvres romanesques romantiques, r  alistes, naturalistes et fin de si  cle. Pr  requis : un cours de litt  rature de deuxi  me ann  e ou la permission du directeur de d  partement.

Leçons et séances de travaux pratiques : 3 h. par semaine.  
Textes : Chateaubriand, *René*; Constant, *Adolphe*; Vigny, *Servitude et grandeur militaires*; Balzac, *le père Goriot*; Stendhal, *le Rouge et le Noir*; Flaubert, *Madame Bovary*; Zola, *Germinal*; Huysman, *A Rebours*; Bourget, *le Disciple*; Lagarde et Michard, *XIXe Siècle*.

#### 340H Littérature : la poésie française au XIXe Siècle.

A. Lauzière

Visage de l'homme et de sa poésie. Les grandes générations et leurs œuvres. Pré-requis : un cours de littérature de deuxième année ou la permission du directeur de département.

Leçons et séances de travaux pratiques : 3 h. par semaine.  
Textes : Lamartine, *les Méditations*; Hugo, *Poésies choisies*; Vigny, *les Destinées*; Musset, *la Nuit d'Octobre*; Nerval, *Aurélia*; Baudelaire, *les Fleurs du Mal*; Rimbaud, *Bateau ivre*; Verlaine, *Romances sans paroles*; Mallarmé, *l'Après-midi d'un Faune*. Lagarde et Michard, *XIXe Siècle*.

#### 360 Littérature canadienne : le roman et le conte.

A. Lauzière

Origines, évolution, influences. Etude d'œuvres. Pré-requis : le cours F-130 ou la permission du directeur de département. Leçons et séances de travaux pratiques : 3 heures par semaine.  
Textes : Gaspé, *les Anciens Canadiens*; Savard, *Menaud, maître-draveur*; Ringuet, *Trente Arpents*; Roy, *Bonheur d'occasion*; Lemelin, *les Plouffe*; Giroux, *Le Gouffre a toujours soif*; Langevin, *Poussière sur la ville*; Bessette, *Le Libraire*; Aquin, *Prochain Episode*; Thériault, *Agaguk*. Contes choisis.  
(Ce cours se donne un an sur deux : 1967-68).

#### 365 Littérature canadienne : la poésie et le théâtre.

G. Labbé, directeur, E. Rioux

Origines, évolution, influences. Etude d'œuvres. Pré-requis : le cours F-130 ou la permission du directeur de département. Leçons et séances de travaux pratiques : 3 h. par semaine.  
Textes : (Collection Classiques Canadiens) : -Fréchette, *Chquette*; Nelligan, *Poésies Complètes*; Desrochers, *A l'Ombre de l'Orford*; Saint-Denys-Garneau, *Poésies Complètes*; Grandbois, *Rivages de l'homme*; Hébert, *Poèmes* (Seuil); Giguère, *l'Adorable Femme des neiges*; Lapointe, *G. Ode au Saint-Laurent*; Vigneault, *Choix de poèmes*. Théâtre : Gélinas, Toupin, Dubé, Languirand-Tougas, *Histoire de la littérature canadienne-française*; Sylvestre, *Anthologie de la poésie canadienne-française*.

Ce cours se donne un an sur deux : 1966-67).

#### 428 Langue : histoire de la langue et linguistique.

Histoire de la langue française. Introduction aux sciences de la linguistique. Suite à la stylistique du cours F.328. Leçons et séances de travaux pratiques. Cours obligatoire pour tout étudiant inscrit à une spécialisation française (major ou honours). 3 h. par semaine.

(Ce cours ne se donnera pas en 1966-67).

#### 430H Littérature : le roman français au XXe Siècle.

G. Labbé

Evolution du roman contemporain. Les grandes œuvres.

Pré-requis : un cours de littérature de 2e ou 3e année ou la permission du directeur de département. Leçons et séances de travaux pratiques : 3 h. par semaine.

Textes : Proust, *Du côté de chez Swann*; Fournier, *Le Grand Meaulnes*; Gide, *La Porte étroite*; le roman-fleuve; Mauriac, *Thérèse Desqueyroux*; Malraux, *La Condition humaine*; Bernanos, *Journal d'un curé de campagne*; Green, *Moïra*; Camus, *L'Etranger*; le nouveau roman. Lagarde et Michard, *XXe Siècle*.

#### 440 Littérature : la poésie française au XXe Siècle.

P. Leduc

Voies nouvelles. Langage et poésie. Approximations. Pré-requis : un cours de littérature de 2e ou 3e année ou la permission du directeur de département. Leçons et séances de travaux pratiques : 3 h. par semaine.

Textes : Claudel, *Cinq Grandes Odes*; Apollinaire, *Alcools*; Valéry, *Poésies* (Vaubourdole); Breton, *Poèmes* (Gallimard) Eluard, *Poèmes*; Aragon, *Les Yeux d'Elsa*; Char, *Le Poème pulvérisé*; Michaux, *Plume*; Saint-John Perse, *Anabase*; Lagarde et Michard, *XXe Siècle*.

#### 450H Littérature : le théâtre français à travers les siècles.

P. Toupin

L'histoire et l'analyse des grandes œuvres de la scène française. Pré-requis : un cours de littérature de 2e ou de 3e année ou la permission du directeur de département. Leçons et séances de travaux pratiques : 3 h. par semaine.

Textes : Corneille, *Polyeucte*; Molière, *L'Ecole des Femmes*; Racine, *Britannicus*; Marivaux, *Le Jeu de l'amour et du hasard*; Beaumarchais, *Le Mariage de Figaro*; Hugo, *Ruy Blas*; Musset, *Le Chandelier*; Claudel, *L'Otage*; Montherlant, *Le Maître de Santiago*; Giraudoux, *La Guerre de Troie n'aura pas lieu*; Sartre, *Huis-Clos*; Genêt, *Haute surveillance*; Ionesco, *La Leçon*.

#### 470 Civilisation et culture : le monde français.

A. Lauzière et collègues

Unicité et diversité. Principales caractéristiques. Institutions et réalisations importantes : langue, esprit, moeurs, arts, politique, commerce, industries, etc. La France et le Canada. Pré-requis : le cours F-228 ou la permission du directeur de département. Cours facultatif pour tout étudiant de 3e ou de 4e année de toute faculté non inscrit au baccalauréat français spécialisé. Leçons et séances de travaux pratiques : 3 h. par semaine. Textes : choisis parmi les meilleures pages des lettres françaises ou étrangères. Documentation audio-visuelle.



## geotechnical science

D. J. McDougall Associate Professor (Chairman)  
(Sabbatical leave)  
A. S. Yalcin Associate Professor  
(On leave of absence)  
J. Jenkins Assistant Professor

### Courses leading to a B.Sc. with a Major in Geotechnical Science.

FIRST YEAR	SECOND YEAR	THIRD YEAR	FOURTH YEAR
Chemistry 101	Chemistry 211	Chemistry 231	Engineering 422
Chemistry 102	Chemistry 212	Engineering 103	English
Engineering 121*	GEOTECH.Sc. 202	Engineering 322	GEOTECH.Sc. 401
French (301)		GEOTECH.Sc. 305	GEOTECH.Sc. 402
GEOTECH.Sc. 201*	GEOTECH.Sc. 302	GEOTECH.Sc. 307	GEOTECH.Sc. 405
Mathematics 106	GEOTFCH.Sc. 304*	GEOTECH.Sc. 403*	GEOTECH.Sc. 406
Mathematics 107 and 108, or 205	GEOTECH.Sc. 303	GEOTECH.Sc. 404	GEOTECH.Sc. 407
Mathematics 206	GEOTECH.Sc. 306	Philosophy	GEOTECH.Sc. 408
Physics 101	Mathematics 205	Physics 205	GEOTECH.Sc. 409
Theology 101 or 115	Philosophy	Physics	Philosophy or Theology
	Theology		

\*This course may be taken in a later year.

### 201 Introduction to Geologic Mapping. Half Course.

Staff  
Students are introduced to the use of transits, levels, compass, air photos, etc. Some elementary concepts of map making and descriptive Geometry are studied, and simple outcrop maps are constructed from notes obtained in the field.  
This is a second year course which is normally taken in the spring at the end of the first year.  
Two week field school in May.

### 202 General Geology. Half Course.

Elements of mineralogy, petrology, soil mechanics, structural geology, historical geology and geomorphology. Emphasis is laid on the relationship of geology to engineering practice. Mineral, rock and soil specimens, topographic and geologic, maps, and air photos are studied in the laboratory. During October several field trips are made to points of interest in and near Montreal.  
Lectures : 3 hours per week for first term.  
Lab. : 3 hours per week for first term.  
Text : Dapples, *Basic Geology for Science and Engineering*. Wiley.

### 300 Geology for Engineers. Full Course.

The first term consists of a study of general Geology (202) and the second term covers a more detailed examination of Engineering Geology (402).

Lectures : 3 hours per week for first term.

Lectures : 2 hours per week for second term.

Laboratory : 3 hours per week for first term.

Laboratory : 2 hours per week for second term.

### 302 Determinative Mineralogy. Full Course.

The identification of Mineral by physical, chemical and optical means. The first part of the course is concerned with the description and identification of some 150 minerals by physical and chemical means. Subsequently the optical properties of non-opaque minerals are studied with the use of petrographic microscope. Where time permits students are introduced to the use of the reflecting microscope for the study of opaque minerals.

Lectures : 2 hours per week for two terms.

Laboratory : 3 hours per week for two terms.

Text : Berry and Mason, *Mineralogy*. Freeman.

### 303 Applied Geophysics. Half Course.

An introduction to geophysical methods of prospecting and of investigating subsurface structures. The theories, uses and limitations of various magnetic, electrical, gravitational and seismic methods are explained and compared. The practical operation of the instruments is reviewed and actual field results are obtained and analysed.

Prerequisite : Geotechnical Science 202.

Lectures : 2 hours per week for one term.

Texts : Eve and Keys, *Applied Geophysics*. Cambridge. Dobrin, *Introduction to Geophysical Prospecting*. McGraw-Hill.

### 304 Field Geophysics. Half Course.

Field work involving small scale seismic, magnetic, gravimetric and electrical surveys.

Prerequisite : Geotechnical Science 303.

Field Work : 2 weeks in May at the McGill Geophysics Field School.

### 305 Structural Geology. Half Course.

A survey of geological structures and their origins. Elements of structural interpretation. In the laboratory, graphical methods are used for the analysis and interpretation of practical problems.

Prerequisite : Geotechnical Science 202, 306.

Lectures : 2 hours per week for one term.

Lab. : 3 hours per week for one term.

Text : Billings, *Structural Geology*. 2nd ed., Prentice-Hall.

### 306 Geotechnical Methods. Half Course.

A survey of field and laboratory methods and techniques which is designed as an introduction to the philosophy and practice of geotechnical investigations. Interested students will take this course in the term following Geotechnical Science 202.

Lectures : 2 hours per week for second term.

Lab. : 2 hours per week for second term.

**307 Meteorology. Half Course.**

Lectures : 2 hours per week for one term.

**308 Mathematical Methods. Half Course.****401 Geomorphology. Half Course.**

An advanced course in the study of landforms produced by the processes of erosion and deposition by water, wind, glaciation and earth movements. The interrelationship of geologic processes, materials and structures, soil types, climatic conditions, etc., in the development of topographic forms is emphasized. Suites of maps and air photos plus one full day field trip are used to illustrate the lectures.

Prerequisite : Geology 202 or 300.

Lectures : 2 hours per week for first term.

Lab. : 2 hours per week for first term.

Text : Thornbury, *Principles of Geomorphology*. Wiley.

**402 Engineering Geology. Half Course.**

Engineering properties of rocks. Ground water. The formation and mechanics of soils including structure, gradation, sedimentation, permeability, compressibility and shearing strength. Application of soil characteristics to typical geotechnical problems in bearing capacity, settlement and lateral earth pressure. Crustal movements and stability of slopes. Frost action in regolith. Laboratory work for experimental determination of above characteristics.

Prerequisite : Geotechnical Science 202.

Lectures : 2 hours per week for second term.

Lab. : 2 hours per week for second term.

Text : Krynine and Judd, *Principles of Engineering Geology and Geotechnics*. McGraw-Hill.

**403 Field Geology. Half Course.**

Surface and underground field mapping methods. Preparation of geological maps, sections and reports from field notes, diagrams, air photos, etc.

Prerequisite : Geotechnical Science 202, 305, 406.

Field Work : 2 weeks in May at the McGill Field Geology School.

Texts : Lahee, *Field Geology*, 5th ed., McGraw-Hill. McKinstry, *Mining Geology*. Prentice-Hall.

**404 Crystallography. Half Course.**

The detailed investigation of the crystal classes with emphasis on their internal structure. Introduction to X-Ray Crystallography.

**405 Geology and Mineral Resources of Canada. Half Course.**

The geology and mineral resources of Canada are described in relationship to the major geomorphic subdivisions. Reading assignments and colloquium are used to provide illustrative material.

Lectures : 2 hours per week for one term.

Colloquium : 1 to 3 hours per week for one term.

Text : *Geology and Economic Minerals of Canada*. 4th ed., Econ. Geol. Series, No. 1 of the *Geological Survey of Canada*.

**406 Petrology. Full Course.**

A systematic survey of the origin, distribution, classification and identification of the common igneous, sedimentary, and metamorphic rocks. In the laboratory megascopic and microscopic properties are studied, using field techniques and the polarizing microscope.

Prerequisite : Geotechnical Science 302, 306.

Lectures : 2 hours per week for two terms.

Lab. : 3 hours per week for two terms.

Texts : Tyrrell, *The Principles of Petrology*. Methuen. Moorehouse, *The Study of Rocks in Thin Section*. Harper.

**407 Economic Mineral Deposits. Full Course.**

The origins, types of occurrence and classification of deposits of important metallic and non-metallic minerals of economic importance.

Prerequisite : Geotechnical Science 305, 406.

Lectures : 2 hours per week for two terms.

Lab. : 3 hours per week for two terms.

**408 Geotechnical Laboratory. Full Course.**

Staff

**409 Applied Sedimentation. Half Course.**

The formation and investigation of consolidated and unconsolidated sedimentary rocks. Particular emphasis is placed on engineering aspects.

Lectures : 2 hours per week for one term.

Lab. : 3 hours per week for one term.

In the Fourth year qualified students may be permitted to take up to two additional full courses in Chemistry, Engineering, Mathematics or Physics.

A course of scientific German is recommended for those contemplating graduate studies. It is strongly recommended that prior to graduation at least one summer be spent in some phase of Geotechnical investigation. In the syllabus of courses those marked with an asterisk may be taken in a later year.

**history**

F. G. W. Adams - Associate Professor (Chairman)

Rev. C. B. O'Keefe, S.J. Associate Professor

D. C. Savage Associate Professor

R. T. Coolidge Assistant Professor

J. T. Copp Assistant Professor

J. F. McGovern Assistant Professor

D. J. O'Brien Assistant Professor

R. E. Ruigh Assistant Professor

C. Schlacks, Jr. Assistant Professor

Rev. J. Monet, S.J. Sessional Lecturer

**COURSES LEADING TO AN HONOURS B.A. IN HISTORY.**

FIRST YEAR	SECOND YEAR	THIRD YEAR	FOURTH YEAR
Classics 102 or 111 or 112 or 121	French HISTORY	HONOURS HISTORY TUTORIAL	HONOURS HISTORY TUTORIAL
English 101	Electives (3), from General Courses	HISTORY	HISTORY
French	Electives (2), from Honours Courses	Electives (2), from Honours Courses	Electives (2), from Honours Courses
Mathematics 101 or Science 101	Philosophy	Philosophy	Philosophy
Theology	Theology	Theology	Theology
Elective (1)			Elective (1)

Of the four honours history courses in the third and fourth year, one may be in the same field as the tutorial course, two must be in other fields, and one may be in another department at the discretion of the student's tutorial advisor.

Students in the honours history programme will be assigned a faculty advisor, who will normally be the director of their honours history tutorial and with whom they must consult concerning their selection of courses.

There is a comprehensive oral examination for all honours history students towards the end of their fourth year.

**COURSES LEADING TO AN HONOURS B.A. IN HISTORY****WITH ENGLISH LITERATURE OPTION :**

A course of studies leading to an Honours B.A. in History with options in English Literature may be taken as an alternative to the above programme. Interested students should contact the Chairman of the History Department.

**COURSES LEADING TO A B.A. WITH A MAJOR IN HISTORY.**

FIRST YEAR	SECOND YEAR	THIRD YEAR	FOURTH YEAR
Classics 102 or 111 or 112 or 121	Classics 112 or 202 or 212 or 221	HISTORY Electives (2), from General or Honours Courses	HISTORY Electives (2) from General or Honours Courses
English 101	English		
French	French		
Mathematics 101 or Science 101	HISTORY	Philosophy	Philosophy
Theology	Elective (1) from General Courses	Theology	Electives (2)
Elective (1)	Philosophy Theology	Elective (1)	

**101. The History of Ideas : Change and Continuity.**

R. E. Ruigh, C. Schlacks

An investigation into the origins and adaptations of ideas which have influenced civilization from Antiquity to the 20th Century.

Lectures & Seminars : 3 hours per week for two terms.

**GENERAL COURSES**

The following courses are open to students of any faculty in the second, third or fourth year. History 101 is recommended as a prerequisite but is not required.

- 201 History of Canada. Full Course.** J. T. Copp  
Lectures : 3 hours per week for two terms.

- 202 History of the United States. Full Course.** D. J. O'Brien  
Lectures : 3 hours per week for two terms.

- 203 History of Modern Europe. 1760-1919. Full Course.** F. G. W. Adams  
Lectures : 3 hours per week for two terms.

- 204 The World Since 1914. Full Course.** F. G.W. Adams  
Lectures : 3 hours per week for two terms.

- 205 History of Mediaeval Europe. Full Course.** R.T. Coolidge  
Lectures : 3 hours per week for two terms.

- 206 Renaissance and Reformation. Full Course.** J. F. McGovern  
Lectures : 3 hours per week for two terms.

- 207 History of England. Full Course.** R. E. Ruigh  
Lectures : 3 hours per week for two terms.

- 208 History of Russia. Full Course.** C. Schlacks  
Lectures : 3 hours per week for two terms.

- 209 Introduction to the History of Africa. Full Course.** D. C. Savage  
Lectures : 3 hours per week for two terms.

- 210 The Middle East. Full Course.** H. Habib  
Lectures : 3 hours per week for two terms.

- 211 History of Latin America. Full Course.** W. J. Carroll  
(Offered in the Evening Division only.)

- 212 English Constitutional History. Full Course.** R. E. Ruigh  
(Not offered in 1966-67).  
Lectures : 3 hours per week for two terms.

**HONOURS COURSES**

The following courses are open to honours students in all departments in the third and fourth years. Students in the third and fourth year majoring in history or in other departments may take these courses with the permission of the lecturer. Normally majors will be allowed to take these courses only if they have successfully completed the prerequisite general course.

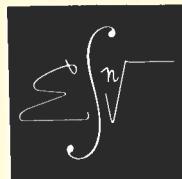
- 300 Britain and Ireland in the Victorian Age. Full. Course.** D. C. Savage  
Seminar : 2 hours per week for two terms.

- 301 Post-Confederation Canada. Full Course.** J. T. Copp  
Seminar : 2 hours per week for two terms.
- 302 The United States : Politics and Foreign Policy, 1890-1941. Full Course.** D. J. O'Brien  
Seminar : 2 hours per week for two terms.
- 303 Church and State in the Middle Ages. Full Course.** R. T. Coolidge  
Seminar : 2 hours per week for two terms.
- 304 The Idea of Nationalism with Special Reference to Africa. Full Course.** D. C. Savage  
Seminar : 2 hours per week for two terms.
- 305 The Era of the Governing Class. English History 1660-1815. Full Course.** R. E. Ruigh  
Seminar : 2 hours per week for two terms.
- 306 Intellectual History of Russia, 1881-1914. Full Course.** C. Schlacks  
Seminar : 2 hours per week for two terms.
- 307 The French Revolution and Napoleon. Full Course.** F. G. W. Adams  
Seminar : 2 hours per week for two terms.
- 308 Mediaeval Economic History. Full Course.** J. F. McGovern  
Seminar : 2 hours per week for two terms.
- 309 Man in Contemporary Society : A Reading and Discussion Course on the Problems of Man in the 20th Century. Full Course.** Staff  
Seminar : 2 hours per week for two terms.
- 310 Philosophy of History. Full Course.**  
Seminar : 2 hours per week for two terms.
- 311 The Age of the Enlightenment. Full Course.**  
(Not offered in 1966-67) F. G. W. Adams  
Seminar : 2 hours per week for two terms.
- 312 Tudor-Stuart England. Full Course.** R. E. Ruigh  
(Not offered in 1966-67)  
Seminar : 2 hours per week for two terms.

**HONOURS HISTORY TUTORIAL****400 & 401. Honours History Tutorial.**

The history tutorial is open to honours students in history only. All honours students in history must take one of the following courses. The tutorial course is given over a two-year period in the third and fourth years. Normally the third year is a reading programme. In the fourth year the student will be required to undertake an honours history essay or other special work at the discretion of the lecturer. There will be an examination at the end of both the third and fourth years, and the tutorial course will be the equivalent of two full courses. The tutorial director may, at his discretion, assign summer reading as part of the course work.

- 1 A selected area in Canadian History.**  
Honours essay required. J. T. Copp
- 2 A selected area in the History of French Canada.**  
Honours essay required. J. Monet
- 3 American Intellectual and Social History.** D. J. O'Brien
- 4 Tudor-Stuart England.** R. E. Ruigh
- 5 Colonial and Independent Africa.**  
Honours essay required. D. C. Savage
- 6 Britain in the 19th and 20th centuries.**  
Honours essay required. D. C. Savage
- 7 A topic in the political, cultural or ecclesiastical History of France, Germany or Italy during the period 300-1300.** R. T. Coolidge
- 8 France in the period from Louis XIV to Napoleon.**  
F. G. W. Adams
- 9 Selected topics in the economic history of the Middle Ages and of the Renaissance.** J. F. McGovern
- 10 Church and State in the 17th Century.** C. B. O'Keefe



## mathematics

Rev. E. O'Connor, S.J.	Professor
I. Benjamin	Associate Professor
A. Prillo	Associate Professor (Chairman)
I. Shtern	Associate Professor
D. A. Bonyun	Assistant Professor
K. N. Majumdar	Assistant Professor
T. Srivastava	Assistant Professor
G. Bashconji	Lecturer
C. G. Hewson	Lecturer
H. Fainsilber	Lecturer
Rev. J. G. McDonough, S.J.	Lecturer
C. Moore	Lecturer
J. Soric	Lecturer

### Courses leading to an Honours B.Sc. in Mathematics.

FIRST YEAR	SECOND YEAR	THIRD YEAR	FOURTH YEAR
Chemistry 101	MATHEMATICS 208	MATHEMATICS 311	English
Chemistry 102	MATHEMATICS 211	MATHEMATICS 415	MATHEMATICS 412
French	MATHEMATICS 318	Philosophy	MATHEMATICS 416
MATHEMATICS 106	MATHEMATICS 319	Physics 311	MATHEMATICS 418
MATHEMATICS 205	Philosophy	Elective	Philosophy
MATHEMATICS 206	Physics 205		or Theology
Physics 101	Theology		
Theology 101 or 115			

### Courses leading to a B.Sc. with a Major in Mathematics.

FIRST YEAR	SECOND YEAR	THIRD YEAR	FOURTH YEAR
Chemistry 101	MATHEMATICS 208	MATHEMATICS 318	English
Chemistry 102	MATHEMATICS 209	MATHEMATICS 319	MATHEMATICS 311
French	MATHEMATICS 211	Philosophy	MATHEMATICS 415
MATHEMATICS 107 and 108, or 205	MATHEMATICS 205	Physics 311	Philosophy
Philosophy	Elective		or Theology
MATHEMATICS 106	Physics 205		Elective
MATHEMATICS 206	Theology		
Physics 101			
Theology 101 or 115			

### 101 Algebra and Trigonometry. Full Course. Staff

Algebra and Graphs : linear and quadratic functions and their graphs; ratio and proportion; the progressions; permutations and combinations; binomial theorem; mathematics of investment.

Plane Trigonometry and Analytic Geometry; the trigonometric functions and solution of right-angled triangles, measurement of angles; identical relationships among the functions; trigonometric equations; graphs of the trigonometric functions; solution of triangles; logarithms; discussion of straight line and circle.

Lectures : 3 hours per week for two terms.

### 104 Algebra and Trigonometry. Full Course.

This course is a combination of mathematics 107 and 108.  
Lectures : 3 hours per week for two terms.

### 106 Analytic Geometry. Half Course.

An elementary study of the straight line and circle, with an introduction to conic sections.

Lectures : 3 hours per week for one term.

Text : Smith, Salkover and Justice, *Analytic Geometry*. Wiley.

### 107 Plane Trigonometry. Half Course.

The trigonometric functions and solution of right-angled triangles; measurement of angles; identical relations among the functions and trigonometric equations; functions of compound angles; transformations of products and sums; logarithms; solution of triangles; graphs of the trigonometric functions; general solutions of trigonometric equations and inverse functions.

Lectures : 3 hours per week for one term.

Text : Hall and Knight, *Elementary Trigonometry*. Macmillan.

### 108 Intermediate Algebra. Half Course.

Linear and quadratic functions; polynomials and algebraic equations; rational functions; ratio and proportion; systems of equations; series of numbers; the progressions; permutations and combinations; mathematical induction; the binomial theorem; approximations; mathematics of investment.

Lectures : 3 hours per week for one term.

Text : Rosenbach and Whitman, *College Algebra*. Ginn.

### 110 Analytical Geometry and Calculus. Full Course.

A first course in Analytical Geometry and Calculus.

Lectures : 3 hours per week for two terms.

### 202 Elementary Statistics. Half Course.

Frequency distributions and descriptive measures; probability; sampling; estimation of confidence intervals; testing hypothesis; tests for randomness; linear relations; correlations.

Lectures : 3 hours per week for one term.

Text : Freund, *Modern Elementary Statistics*. Prentice-Hall.

### 203 Theory of Interest. Half Course.

Simple and compound interest; discounts, annuities certain; sinking funds; bonds; elementary interpolation.

Lectures : 3 hours per week for one term.

Text : Simpson, Pirenian and Crenshaw, *Mathematics of Finance*. Prentice-Hall.

### 205 Calculus. Full Course.

A first course aiming to cover as completely as possible the ordinary techniques and applications of calculus.

Limits of functions, differentiation and integration of polynomials with applications; second derivative and differentiation of algebraic, exponential and logarithmic functions; curvature; definite integral.

Differentiation and integration of trigonometric functions; methods of integration; improper integrals; applications of the definite integrals; approximate integrals; partial derivatives; multiple integrals; expansion of functions.

Lectures : 3 hours per week for two terms.

Text : Middlemiss, *Differential and Integral Calculus*.

**206 Analytic Geometry of Two and Three Dimensions. Half Course.**

This course, which begins with conic sections, embraces the chief topics of plane and space geometry that are of common interest to both the science and the engineering student. It includes the following : the principal properties of the parabola, the ellipse, the hyperbola; coordinate transformations and polar coordinates; method of distinguishing type of conic from its unreduced equation; some higher plane curves; parametric equations; cartesian spherical and cylindrical coordinates in space; equations of lines, planes, cylinders, cones, and surfaces of revolution; an introduction to the study of quadric surfaces. Lectures : 3 hours per week for one term.

Text : Smith, Salkover and Justice, *Analytic Geometry*. Wiley.

**208 Algebra. Full Course.**

The first part of this course aims at an accurate working familiarity with the following topics : real numbers; decimal approximations; abbreviated methods of computation; inequalities; complex numbers; formal and functional properties of polynomials; polynomial equations; rational functions.

The second part embraces the following topics : solution of cubic and quartic equations by radicals; systems of linear equations; determinants; matrices; linear transformations (projective and complex); symmetric functions of the roots of an equation; approximation of irrational numbers by rationals; impossibility of angle trisection by ruler and compass; sequences; limits; summation of series.

Lectures : 3 hours per week for two terms.

Text : Courant and Robbins, *What is Mathematics?* Oxford.

**209 Algebra. Half Course.**

Functions; inequalities; complex numbers; determinants and matrices; partial fractions; infinite series; statistics. Lectures : 2 hours per week for two terms.

**210 Analytical Geometry and Calculus. Full Course.**

A second course in Analytical Geometry and Calculus. Lectures : 3 hours per week for two terms.

**211 Linear Algebra. Half Course.**

Vector spaces; Euclidean n-space; determinants; linear transformations and matrices; bilinear and quadratic forms; characteristic values and vectors of linear transformations; similarity of matrices. Lectures : 2 hours per week for two terms.

**214 Algebra and Calculus. Full Course.**

An introductory course aiming to cover the ordinary techniques and applications of calculus. The course will include topics in Algebra and elementary differential equations. Lectures : 3 hours per week for two terms.

**308 Advanced Calculus. Half Course.**

Limits and continuity of a function of two variables; partial differentiation; multiple and line integrals; infinite series; Fourier series; improper integrals and Gamma functions. Lectures : 2 hours per week for two terms.

Text : Sokolnikoff, *Higher Mathematics for Engineers and Physicists*. McGraw-Hill.

**309 Ordinary Differential Equations. Half Course.**

Equations of first order and first degree; first order equations of degree higher than the first, singular solutions; linear equations with constant coefficients; solving of equations by Laplace Transforms; Equations of order higher than the first; Existence Theorems and applications; solution by series; numerical solutions.

Lectures : 2 hours per week for two terms.

Text : Kells, *Elementary Differential Equations*. McGraw-Hill.

**311 Real Analysis. Full Course.**

Limits and continuity; differentiability; infinite series; functions defined by power series; integration; convergence and uniformity.

Lectures : 3 hours per week for two terms.

Text : Rankin, *An Introduction to Mathematical Analysis*.

**314 Engineering Mathematics. Half Course.**

Introduction to vectors; Lagrange's partial differential equation; solution by separation of variables; Laplace's Equation; Bessel Functions; Legendre's Functions.

Lectures : 2 hours per week for one term.

**315 Function of a Complex Variable. Half Course.**

Analytic functions; Cauchy Riemann Differential Equations; continuity and differentiability; complex integral calculus; calculus of residues; conformal transformations; Fourier Series.

Lectures : 2 hours per week for one term.

**318 Advanced Calculus. Full Course.**

Limits and continuity of a function of two variables; partial differentiation; multiple and line integrals; infinite series; Fourier series; improper integrals and Gamma functions; complex variables.

Lectures : 3 hours per week for two terms.

Text : Sokolnikoff, *Higher Mathematics for Engineers and Physicists*. McGraw-Hill.

**319 Differential Equations. Full Course.**

Equations of first order and first degree; first-order equations of degree higher than the first, singular solutions; linear equations with constant coefficients; solving of equations by Laplace Transforms; equations of order higher than the first; Existence Theorems and applications; solution by series; numerical solutions; partial differential equations.

Lectures : 3 hours per week for two terms.

Text : Kells, *Elementary Differential Equations*. McGraw-Hill.

**412 Real and Complex Analysis. Full Course.**

A continuation of Mathematics 311. Functions of a Real Variable; Functions of a Complex Variable.

Lectures : 3 hours per week for two terms.

Texts : Titchmarsh, *The Theory of Functions*. Oxford. Knopp, *Theory of Functions*. Part II. Dover.

**415 Modern Algebra. Full Course.**

The structure of number systems; integral domains, ordering factorization, fields, continuity, algebraic closures; groups, vector spaces; matrices and linear groups; algebra of classes; transfinite arithmetic; algebraic number fields; Galois theory.

Lectures : 3 hours per week for two terms.

Text : Birkhof and MacLane, *A Survey of Modern Algebra*.  
Macmillan.

**416 Number Theory. Full Course.**

An introduction to the problems and methods of elementary and analytic number theory.

Lectures : 3 hours per week for two terms.

**417 History of Mathematics. Half Course.**

Lectures : 1 hour per week for two terms.

**418 Numerical Analysis. Full Course.**

Lectures : 3 hours per week for two terms.

**modern languages**

A. E. Lauzière Professor (Acting Chairman)  
U. Sautter Assistant Professor  
E. Ottolenghi Lecturer  
J. Costa Lecturer  
R. Dolinsky Technician Language Lab.  
Part-time Instructor :  
M. Tiffou Lecturer

**Courses leading to a B.A. with a Major in Spanish.**

FIRST YEAR	SECOND YEAR	THIRD YEAR	FOURTH YEAR
Classics 102 or 111 or 112 or 121	Classics 112 or 202 or 212 or 221	SPANISH Electives (2)	SPANISH Electives (3)
English 101	English	from 320, 330 or 340	from 420, 430 440, 450 or 460
French 120, 124, 128 or 130	French 220, 224, 228 or 230	Philosophy	Philosophy
Mathematics 101 or Science 101	Philosophy SPANISH 200	Theology Language	Language Elective (1)
SPANISH 100	Theology		
Theology 101	Elective (1)		

**German****100 Functional German**

U. Sautter

An elementary course for students with little or no knowledge of German.

A lecture and laboratory course.

Three hours per week for two terms.

**200 Intermediate German**

U. Sautter

Practice in grammar and conversation; composition, readings from modern German authors.

A lecture and practice course.

Three hours per week for two terms.

**Italian****100 Functional Italian**

J. Costa

An elementary course for students with little or no knowledge of Italian.

A lecture and laboratory course.

Three hours per week for two terms.

**200 Intermediate Italian**

J. Costa

Practice in grammar and conversation; composition, readings from modern Italian authors.

A lecture and practice course.

Three hours per week for two terms.

**Spanish****100 Functional Spanish.**

E. Ottolenghi, M. Tiffou

Essentials of pronunciation and grammar; composition, graded reading of Spanish texts. For students with no previous knowledge of Spanish.

Lectures : 3 hours per week for two terms. Language Lab. : 2 hours per week for two terms.

**200 Intermediate Spanish.**

E. Ottolenghi

Grammar review; practice in conversation composition; selections from the writings of the 19th and 20th centuries introducing the student to the literature and the civilization of Spain and of Spanish America.

Lectures : 3 hours per week for two terms. Language Lab. : 1 hour per week for two terms.

**320 Spanish Literature**

E. Ottolenghi

Contemporary literature. Advanced composition and conversation.

Lectures : 3 hours per week for two terms.

**330 Survey of Spanish Literature. (not offered in 1966-67)**

A chronological consideration of Spanish writers from the *Poema de mio Cid* to the post-war period.

Lectures : 3 hours per week for two terms.

**340 Literature of the Golden Age. (not offered in 1966-67)**

Lectures : 3 hours per week for two terms.

**370 Advanced stylistics and phonetics. (not offered in 1966-67)**

Lectures : 3 hours per week for two terms.

**420 Literature of the Nineteenth century. (not offered in 1966-67)**

Lectures : 3 hours per week for two terms.

**430 Twentieth-century literature in Spain. (not offered in 1966-67)**From the Generation of '98 to the present day.  
Lectures : 3 hours per week for two terms.**440 Latin American literature. (not offered in 1966-67)**From the colonization period to the present day, with particular emphasis on 20th-century authors.  
Lectures : 3 hours per week for two terms.**450 Cervantes. (not offered in 1966-67)**

Lectures : 3 hours per week for two terms.

**460 Old Spanish language and literature. (not offered in 1966-67)**Readings in medieval texts.  
Lectures : 3 hours per week for two terms.**music**

G. Allaire Assistant Professor

**101 History and Literature of Music. Full Course.**

A course designed to acquaint the student with the style, the most important musical forms and representative masterpieces of the different periods of the history of music from the Middle Ages to Modern Times.

Lectures : 3 hours per week for two terms.

Text : Machlis, *The Enjoyment of Music*, (Norton).

This course is available to Upper Classmen as an elective.

**philosophy**

J. P. Doyle Assistant Professor (Chairman)

R. C. Hinners Associate Professor

A. S. Kawczak Associate Professor

V. J. McNamara Associate Professor

D. Park Assistant Professor

H. H. Lau Assistant Professor

J. G. McGraw Assistant Professor

J. D. Morgan Assistant Professor

M. F. Reidy Assistant Professor

D. Clark Lecturer

**Courses leading to an Honours B.A. in Philosophy.**

Students interested in this programme should consult the Department.

**Courses leading to a B.A. with a Major in Philosophy.**

FIRST YEAR      SECOND YEAR      THIRD YEAR      FOURTH YEAR

Classics 102 or 111 or 112 or 121	Classics 112 or 202 or 212 or 221	History Elective (1) PHILOSOPHY	History Elective (1) PHILOSOPHY
English	English	Elective (1)	Elective (1)
French	French	PHILOSOPHY	PHILOSOPHY
History 101	Philosophy	Seminars (2)	Seminars (2)
Mathematics 101 or Science 101	Political Science 201	Theology	Political Science Elective (1)
Theology 101	Theology		

**200 Introduction to Philosophy**

Staff

A consideration of major problems in Philosophy and types of answers given to them. This course is a prerequisite for any further courses.

**COURSES OPEN TO THIRD YEAR ARTS STUDENTS :**

- 310 Philosophy of Nature and Science** V. J. McNamara  
An introduction to the problems of nature and science from the Greeks to Contemporary thinkers through reading and discussion of selected texts.

- 312 Philosophy of Human Knowledge** H. H. Lau  
Formulation of the problem of human knowing as expressed by Descartes, Berkeley, Hume, and Kant, and the Platonic and Aristotelian background thereof. Evaluation of the scope of human knowing in contemporary philosophy.

- 311 Philosophical Psychology (Philosophy of Man).** M. F. Reidy  
An introduction to some of the philosophical problems surrounding studies of human behaviour. Part I: Emotion. Part II: Perception and knowledge. Part III: Unity and personality of Man. Part IV: Immortality of the human soul.

- 314 Ethics.** J. P. Doyle  
A consideration of principles underlying moral evaluation, with reference to classical and other positions.

- 315 Philosophy of God.** J. G. McGraw  
The question of natural knowledge of God and the problems attendant upon it.

**COURSES OPEN TO THIRD YEAR STUDENTS IN COMMERCE, ENGINEERING, AND SCIENCE :**

ing, and Science :

- 321 Philosophy of Human Nature.** J. P. Doyle  
A study of classical positions on the nature of man viewed in relation to representative contemporary positions.
- 322 Questions in Epistemology.** H. H. Lau  
The nature and scope of human knowing since Descartes with special emphasis on the problems regarding science and philosophy today.
- 323 Political Philosophy.** V. J. McNamara  
This course treats of the philosophical content of representative political structures from Greek to contemporary times through readings from selected texts.
- 324 Ethics : Questions in Moral Evaluation of Human Conduct.** J. D. Morgan  
A consideration of the following moral problems and the theoretical bases upon which answers are suggested: (1) Capital punishment, (2) civil disobedience, (3) divorce, (4) suicide, (5) birth control, and (6) nuclear warfare.
- 325 Philosophy and Religion.** R. C. Hinners  
A study of the interrelationships between philosophical reason and religion. Readings include texts of Heraclitus, Parmenides, Plato, Aristotle, St. Anselm, St. Thomas, Hume, Kant, and Kierkegaard.

**COURSES OPEN TO FOURTH YEAR ARTS STUDENTS :**

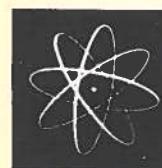
- 411 History of Ancient Western Philosophy.** M. F. Reidy  
A study of the major figures in Greek and Roman Philosophy from Thales to Plotinus. Emphasis is placed on "letting the philosopher speak for himself".
- 412 The Mediaeval Period.**
- 413 The Classical Modern Period.**
- 414 Some Contemporary Philosophical Movements.** A. S. Kawczak  
Discussion of selected texts in 20th century philosophy. Special attention is given to representative writings of existentialist and analytic philosophers.
- 415 American Philosophy.** J. D. Morgan  
A study of the writing of American philosophers from colonial times to the present with special emphasis placed on the Pragmatists.

**COURSES OPEN TO FOURTH YEAR STUDENTS IN COMMERCE, ENGINEERING, AND SCIENCE :**

- 420 Man and Nature.** R. C. Hinners  
(Not offered in 1966-67).
- 421 Political Philosophy.** (Not offered in 1966-67).
- 422 Logic and Scientific Method.** A. S. Kawczak  
The course comprises: 1) elements of modern formal logic: first order functional calculus, techniques of formal proof, theory of axiomatic systems; 2) a comparative study of the structure and methods of pure mathematics, physical and social sciences, history and evaluative disciplines.
- 423 Marxism and Existentialism.** R. C. Hinners  
The development of Marxism and existence philosophies from their common Hegelian origin in the light of recent attempts to synthesize them. Selected readings from the works of Hegel, Marx, Lenin, Kierkegaard, Sartre, and Merleau-Ponty.

**COURSES OPEN TO THIRD AND FOURTH YEAR STUDENTS MAJORING IN PHILOSOPHY :**

- 515 Seminar — Theories of Knowledge and Love.** J. G. McGraw
- 516 Seminar — topic to be announced.**



**physics**

- C. E. Eappen, Associate Professor (Acting Chairman)  
S. N. Bagchi Professor  
Rev. H. J. MacPhee, S.J. Professor  
N. de Takacsy Assistant Professor  
R. L. Kovacs Assistant Professor  
S. Santhanam Assistant Professor

**Honour and Strong Major Physics Program.**

FIRST YEAR	SECOND YEAR	THIRD YEAR	FOURTH YEAR
Chemistry 101	Mathematics 318	Philosophy	English
Chemistry 102	Mathematics 319	PHYSICS 305 or 410	PHYSICS 306 or 404
French	Philosophy	PHYSICS 306 or 406	PHYSICS 403
Mathematics 106	PHYSICS 205	PHYSICS 307	PHYSICS 408
Mathematics 205	PHYSICS 220	PHYSICS 320	PHYSICS 410
Mathematics 206	PHYSICS 310	PHYSICS 310 or 401	PHYSICS 401 or 420
PHYSICS 101		Theology	Theology or
Theology 101 or 115			Philosophy

**Strong Majors do not take Physics 404, 410 or 420.**

<b>Physics Major Program.</b>			
FIRST YEAR	SECOND YEAR	THIRD YEAR	FOURTH YEAR
Chemistry 101	Chemistry 231	Mathematics 318	English
Chemistry 102	Mathematics 205	or Science Elective	PHYSICS 311
French	or 318	Mathematics 319	PHYSICS 406
Mathematics 106	Mathematics 209	Philosophy or	Philosophy or
Mathematics 205, or 107 and 108	PHYSICS 205	Theology	Theology
Mathematics 206	Philosophy	PHYSICS 304	Elective (1)
PHYSICS 101	Theology	PHYSICS 307	
Theology 101 or 115		PHYSICS 401	

### 101 General College Physics. Full Course.

An introductory course on the elements of mechanics, sound, heat, electricity and light.

Lectures : 3 hours per week for two terms.

Lab. : 1 period per week for two terms.

Textbook : *College Physics* by Sears and Zemansky. (Addison-Wesley).

### 201 Heat, Light and Sound. Full Course.

Lectures : 3 hours per week for two terms.

Lab. : 1 period per week for two terms.

### 205 Electricity and Magnetism. Full Course.

Electrostatic field, capacitance, dielectrics, direct current circuits, thermoelectricity, magnetic fields, electromagnetic induction, alternating current circuits, Maxwell's equations.

Lectures : 3 hours per week for two terms.

Lab. : 1 period per week for two terms.

Textbook : *Fundamentals of Electricity and Magnetism* by Arthur Kip. (McGraw-Hill).

### 220 Methods of Mathematical Physics. Full Course.

*Elementary linear algebra from the standpoint of physics*: Algebra of complex numbers; systems of simultaneous linear equations; determinants and matrices; vector algebra; transformation of coordinates; vector analysis, tensors of second rank; quadratic forms; polynomials.

Lectures : Two hours per week for two terms.

Problems : One period per week for two terms.

References : *Linear Algebra* by G. Hardley (Addison-Wesley); *Linear Algebra* by P. C. Shields (Addison-Wesley); *Vector Analysis* by Phillips (Wiley); *Vector Analysis* (Schaum's series); *Matrices* (Schaum's series).

### 304 Thermodynamics. Full Course.

An introductory course in thermodynamics and kinetic theory. It includes the first and second laws of thermodynamics with ample applications and introduces the Helmholtz and Gibbs functions.

Lectures : Three hours per week first term.

Textbook: *Introduction to Thermodynamics* by Sears (Addison-Wesley).

### 305 Thermodynamics and Statistical Mechanics. Full Course.

(The Second Half will not be given in 1966-67).

The first half in Physics 304; the second half is classical and quantum statistics with applications.

Lectures : 3 hours per week for two terms.

### 306 Modern Physics and Introduction to Quantum Mechanics. Full Course.

Relatively, the classical experiments and theories of thermal radiation electrons, photon interactions, atomic models and spectra. The Bohr atom and the old quantum mechanics. Solutions to Schrodinger's equation for barriers, well potentials, harmonic oscillator and one-electron atoms. Perturbation theory, magnetic moments, spin, identical particles, multi-electron atoms, molecules, X-rays.

Lectures : 3 hours per week for two terms.

Lab. : 1 period per week for two terms.

Textbook : Eisberg : *Fundamentals of Modern Physics* by Eisberg (John Wiley & Sons).

### 307 Electronic Circuits. Full Course.

Introductory to semi-conductor theory, power supplies, transistor and tube biasing, frequency response of a-c linear amplifiers, a-c analyses of various circuit configurations, feed-back, non-linear devices.

Lectures : Three hours per week, for all, first term; two hours per week for honour students and one-hour per week for physics majors second term.

Lab. : 1 period per week for two terms.

Text : To be chosen.

### 310 Introduction to Theoretical Mechanics. Full Course.

Fundamental principles, statics of a particle and of a rigid body, work and energy, gravitation, principle of virtual work, a particle in a uniform force field, harmonic oscillator, motion of a system of particles, plane motion of a rigid body, central force fields, motion of a particle in an accelerated reference frame, motion under constraints, motion of a rigid body about a fixed point.

Lectures : 3 hours per week for two terms.

### 311 Theoretical Mechanics. Full Course.

A course treating most of the Topics of Physics 310 and 410 but with simpler applications.

Lectures : 3 hours per week for two terms.

Textbook : To be chosen.

### 320 Methods of Mathematical Physics II. Full Course.

Calculus of variations; techniques for the solution of partial differential equations of physics with applications to : vibration of a string, vibration of a membrane, wave equation for sound and electro-magnetic waves, the potential equation, equations for heat conduction and diffusion; orthogonal series; Sturm-Liouville problems; elementary properties of Legendre functions, Spherical harmonics, Bessel functions, functions of Hermite and Laguerre, Dirac's delta function.

Lectures : 3 hours per week for two terms.

References : H. Sagan: *Boundary and Eigenvalue Problems of Mathematical Physics* (Wiley); I. N. Sneddon : *Special Functions of Mathematical Physics and Chemistry* (Oliver & Boyd Ltd. Edinburgh); Robert Weinstock : *Calculus of Variations* (McGraw-Hill); George P. Tolstov : *Fourier Series* (Prentice Hall).

#### 401 Optics. Half Course.

Principles of geometric and of physical optics, interference, diffraction, polarization, double-refraction.

Lectures : 3 hours per week for one term.

Textbooks : Morgan : *Optics* (McGraw-Hill). Wood : *Physical Optics* (MacMillan).

#### 403 Electromagnetic Theory. Full Course.

Analysis of electrostatic and electromagnetic field; non-stationary fields and Maxwell's equations; waves in source-free space; electromagnetic radiation, basic relativistic electro-dynamics.

Lectures : 3 hours per week for two terms.

References : Jackson : *Classical Electrodynamics* (John Wiley); Panofsky and Phillips : *Classical Electricity & Magnetism* (Addison-Wesley).

#### 404 Nuclear Physics. Full Course.

Radioactivity, alpha-particle spectra, beta-particle spectra, positron emission, orbital-electron capture, gamma ray emission. Methods of detecting, identifying and measuring energies of gamma rays and charged particles. Theory of energy loss of charged particles and gamma rays in matter.

Nuclear structure and nuclear models. Nuclear reactions. Neutrons, detection methods, slowing down and diffusion, fission and fusion, the chain reaction, nuclear reactors. Introduction to high energy physics.

Lectures : 3 hours per week for two terms.

Lab. : One period per week for two terms.

Textbook : Segree : *Nuclei and Particles* (W. A. Benjamin). References :: I. Kaplan : *Nuclear Physics* (Addison-Wesley); R. D. Evans : *Atomic Nucleus* (McGraw-Hill); M. A. Preston: *Physics of the Nucleons* (Addison-Wesley).

#### 406 Modern Physics. Full Course.

Part 1 : Special relativity; quantum effects; particle aspects of electro-magnetic radiation, wave aspects of material particles; nuclear atom and Bohr theory; elementary quantum mechanics of atoms. Part 2 : X-ray spectra, radio-activity; nuclear structure; accelerators and detectors; nuclear reactions; molecular and solid-state physics.

Lectures : 3 hours per week for two terms.

Textbook : Van Name : *Modern Physics* (Prentice-Hall).

#### 407 Modern Physics. Half Course.

This is part 1 of Physics 406, taken during first term.

#### 408 Topics in Contemporary Physics. Full Course.

A selection will be made from the following: Elementary quantum mechanics, solid state physics, cryogenics; lasers and masers; particle accelerators; mossbauer effect, nuclear reactors, nuclear magnetic resonance, electrom spin resonance, electron paramagnetic resonance; plasma and magnetohydrodynamics; miscellaneous topics such as quasars, high pressure, high vacuum, relativity, acoustics, microwaves, atomic standards, high magnetic fields, optics, electronics.

Lectures : 3 hours per week for two terms.

Lab. : 3 hours per week for two terms.

#### 410 Theoretical Mechanics. Full Course.

D'Alembert's principle, variational principles, Lagrange's equations, Hamilton's principles, scattering in central-force field, kinematics of rigid body motion, rigid body equations of motion, special relativity, Hamilton's equations of motion, canonical transformations, Hamilton-Jacobi theory, small oscillations, continuous systems and fields.

Lectures : 3 hours per week for two terms.

Textbooks : H. Goldstein : *Classical Mechanics* (Addison-Wesley).

#### 420 Methods of Mathematical Physics III. Full Course.

Introduction to linear operator and Hilbert space; Pfaffian differential forms and equations with applications to thermodynamics; linear partial differential equations of the first order; linear partial differential equations of the second order : hyperbolic, parabolic and elliptic types; Green's function; integral transforms and integral equations.

Lectures : 3 hours per week for two terms.

References : J. H. Dettman : *Mathematical Methods in Physics*.

I. N. Sneddon : *Partial Differential Equations* (McGraw-Hill).

R. V. Churchill : *Operational Methods* (McGraw-Hill).

I. N. Sneddon : *Fourier Transforms* (McGraw-Hill).

B. Friedman : *Principles and Techniques of Applied Mathematics* (Wiley).



### political science

H. Habib, Associate Professor (Chairman)

R. Coyte Assistant Professor

A. Small Assistant Professor

D. Porter Sessional Lecturer

D. Vince Sessional Lecturer

#### Courses leading to a B.A. with a Major in Political Science.

FIRST YEAR	SECOND YEAR —	THIRD YEAR	FOURTH YEAR
Classics 102 or 111 or 112 or 121	Classics 112 or 202 or 212 or 221	Philosophy POLITICAL	Philosophy POLITICAL
English 101	English	SCIENCE 315	SCIENCE 371
French	French	POLITICAL	POLITICAL
Mathematics 101 or Science 101	Philosophy POLITICAL	SCIENCE Electives (2)	SCIENCE Electives (2)
Theology Elective (1)	SCIENCE 201 Theology	Theology POLITICAL	POLITICAL SCIENCE or Social Science Elective (1)

A Major in Political Science consists of a minimum of five full courses in the subject, and a Senior Seminar. A student majoring in Political Science must include Political Science 201 and 315 in his programme. A student may substitute a Social Science or History course for a Political Science elective with the approval of the Political Science Department.

**Courses leading to a B.A. with an Honours in Political Science.**

FIRST YEAR	SECOND YEAR	THIRD YEAR	FOURTH YEAR
Classics 102 or 111 or 112 or 121	Classics 112 or 202 or 212 or 221	English Philosophy POLITICAL SCIENCE 317	Philosophy POLITICAL SCIENCE 371
English 101	English or French	POLITICAL SCIENCE	POLITICAL SCIENCE
French			Electives (2)
Mathematics 101 or Science 101	Philosophy POLITICAL SCIENCE 201	Elective (1)	Political Science or Social Science
Theology	POLITICAL SCIENCE 315	Theology	Elective (1)
Elective (1)	Theology		

An Honours in Political Science consists of a minimum of six full courses in the subject, and a Senior Seminar. A student honouring in Political Science must include Political Science 201 and 315 in his Sophomore year, Political Science 317 in his Junior year, and a Seminar in his Senior year. A student may substitute a Social Science or History course for a Political Science elective with the approval of the Political Science Department. All Honours Students must pass a comprehensive oral examination in their senior year.

**201 An Introduction to Political Science. Full Course.**

H. Habib

A basic course in the fundamentals and significance of Political Science.

Lectures : 3 hours per week for two terms.

Text : Schultz, *Essentials of Government*. Prentice Hall.

**211 Britain and the Commonwealth. Full Course.** R. Coyte

Government and Politics of Great Britain, and the nature and future of Commonwealth relations.

Lectures : 3 hours per week for two terms.

Text : Carter-Hertz, *Major Foreign Powers*, Harcourt, Brace and World. Miller, *The Commonwealth in the World Today*. Duckworth.

**217 The Middle East. Full Course.** H. Habib

Government and Politics of the Middle East. An historical and political Survey.

Lectures : 3 hours per week for two terms.

Texts : Kirk, *A Short History of the Middle East*. Methuen. Harari. *Government and Politics of the Middle East*. Prentice Hall.

**229 Public Administration. Full Course.**

A theoretical study of government management and institutions, based on the Canadian administrative experience and related to Anglo-American comparative practice.

Lectures : 3 hours per week for two terms.

Text : Hodgetts and Corbett, *Canadian Public Administration*. Macmillan.

**237 International Law. Full Course.**

H. Habib

An introduction to International Law.

Lectures : 3 hours per week for two terms.

Text : Whitaker, *Politics and Power*. Harper and Row.

**251 Canadian Government. Full Course.**

D. Vince

An institutional and functional analysis of the political process in Canada.

Prerequisite : Political Science 201 or equivalent.

Lectures : 3 hours per week for two terms.

Text : Dawson, *Government of Canada*. Toronto University Press.

**253 An Introduction to Legal Theory and the Canadian Constitution. Full Course.**

A systematic inquiry into the sources and principles of law and the Canadian Constitutional system, with special reference to judicial interpretation.

Prerequisite : Political Science 201 or approval of the Department of Political Science.

**271 International Politics. Full Course.**

A. Small

A theoretical analysis of inter-state relations, drawing upon development in the Foreign Policy, Diplomacy and International Organization of the Twentieth Century.

Prerequisite : Political Science 201 or approval of the Department of Political Science.

Lectures : 3 hours per week for two terms.

Text : Morgenthau, *Politics Among Nations*, Knopf.

**273 International Organization. Full Course.**

A. Small

A survey and analysis of attempts to institutionalize order and change in the international society. Chief emphasis will be upon the United Nations.

Prerequisites : Political Science 201 or equivalent.

Lectures : 3 hours per week for two terms.

Text : Claude, *Swords Into Plowshares*, Random House.

**311 Comparative Government. Full Course.**

H. Habib

A survey of contemporary political systems, forces and problems in Western Europe with special emphasis on France, Germany and the United Kingdom.

Lectures : 3 hours per week for two terms.

Text : Carter-Hertz, *Major Foreign Powers*. Harcourt, Brace and World.

**315 Political Philosophy. Full Course.**

Ancient to the Reformation.

Prerequisites : Political Science 201 or approval of the Department of Political Science.

Lectures : 3 hours per week for two terms.

Text : Sabine, *A History of Political Theory*, Holt, Rinehart and Winston.

**317 Political Philosophy. Full Course.**

Post Reformation to the Twentieth Century.

Prerequisites : Political Science 201 or approval of the Department of Political Science.

Lectures : 3 hours per week for two terms.

Text : Sabine, *A History of Political Theory*, Holt, Rinehart and Winston.

**319 Political Theory. Full Course.**

R. Coyte

A critical analysis of contemporary political theory.

Prerequisites : Political Science 201 or approval of the Department of Political Science.

Lectures : 3 hours per week for two terms.

Text : Stankiewicz, *Political Thought Since World War II*, Collier-Macmillan Ltd.

**323 Latin American Government. Full Course.**

Government and Politics of Latin America.

Lectures : 3 hours per week for two terms.

Text : Needler, *Political Systems of Latin America*, Van Nostrand.

**325 African Government and Politics. Full Course.**

D. Porter

Colonialism, imperialism and the rise of nationalism; government and politics of the independent African states.

Lectures : 3 hours per week for two terms.

**361 The Soviet Union. Full Course.**

R. Coyte

Government and Politics of the Soviet Union. Basic theories of Communism; evolution of the Soviet system.

Lectures : 3 hours per week for two terms.

Text : McClosky and Turner, *The Soviet Dictatorship*, McGraw-Hill.

**371 Senior Seminar. Full Course.**

A. Small

Workshop in Problems of Political Science. Method of group inquiry used to forward constructive, critical thinking and jointly reached conclusions.

Seminar : 3 hours per week for two terms. Tutor will direct work in first term. Open to Political Science Seniors only.

**psychology**

V. Maheux Associate Professor (Chairman)  
J. Lavery Associate Professor

**Courses leading to a B.A. with a Major in Psychology.**

FIRST YEAR	SECOND YEAR	THIRD YEAR	FOURTH YEAR
Classics 102 or 111 or 112 or 121 English 101 French Mathematics 101 Theology 101 or 115 Elective (1)	Biology 221 Classics 112 or 202 or 212 or 221 French Philosophy PSYCHOLOGY 201 Theology	Philosophy PSYCHOLOGY 305 PSYCHOLOGY 310 Theology Elective (1) *	English Philosophy Electives (4) *



CHEMISTRY LABORATORY

<b>Courses leading to a B.Sc. with a Major in Psychology.</b>			
FIRST YEAR	SECOND YEAR	THIRD YEAR	FOURTH YEAR
Chemistry 101	Biology 221	Philosophy	Philosophy or
Chemistry 102	Chemistry 221	PSYCHOLOGY 305	Theology
French	and 222	Electives (3) *	PSYCHOLOGY 355
Mathematics 106	English		Electives (3) *
Mathematics 107	Philosophy		
and 108, or 205	PSYCHOLOGY 201		
Mathematics 206	Theology		
Physics 101			
Theology 101			
or 115			

\* The Department of Psychology offers courses leading to both a B.A. and B.Sc. The curriculum is designed to provide a general cultural training with a major concentration in Psychology and to give adequate preparation for graduate studies.

A Major in Psychology consists of a minimum of six full courses in the subject.

B.A. students must include Psychological Statistics & Research Methods as well as Social Psychology in their field of concentration; B.Sc. students must include Psychological Statistics & Research Methods as well as Physiological Psychology in their program. Students planning graduate training in Psychology are encouraged to select two foreign languages.

### **201 Introduction to Psychology. Full Course. J. Lavery**

Course designed to provide the students with an understanding of the basic concepts and techniques of experimental psychology. Will cover some of the major areas of psychology such as learning, sensation and perception, intelligence, motivation, emotion, personality, etc.

Prerequisite to all other classes in Psychology.

Lectures : 3 hours per week for two terms.

Text : To be announced.

### **301 Developmental Psychology. Full Course. J. Lavery**

An examination of physical intellectual, emotional and social development from conception through to old age, with emphasis on child and adolescent development.

Lectures : 3 hours per week for two terms.

Text : To be announced.

### **305 Psychological Statistics & Research Methods. Full Course. V. Maheux**

Descriptive and inferential statistics with application to the analysis of behavior. The second part of the course will be devoted to a close examination of methodology and research procedures utilized in Psychology. Students will be required to carry out investigations of psychological problems and to report them in the form of an Honours thesis. Required course for all majors in Psychology.

Lectures : 3 hours per week for two terms.

Text : To be announced.

### **310 Social Psychology. Full Course.**

This course is also listed as Sociology 201. For description, see Sociology.

Lectures : 3 hours per week for two terms.

### **350 Personality : Normal and Abnormal. Full Course. (Not offered in 1966-1967).**

Survey of Personality structure and theories. Emphasis will be placed on the study of normal personality. Symptoms and dynamics of neuroses, psychoses, and other behavior disorders will be included for the purpose of clarifying normal personality processes.

Lectures : 3 hours per week for two terms.

Text : To be announced.

### **355 Physiological Psychology. Full Course. (Not offered in 1966-1967).**

A study of the physiological basis of behavior : sensory systems, response mechanisms, nervous system. Other topics include the physiological correlates of perception, motivation, emotion, learning and complex behavior patterns.

Lectures : 3 hours per week for two terms.

Text : Morgan, *Physiological Psychology*, third edition. McGraw-Hill.

### **360 Motivation. Full Course. (Not offered in 1966-1967).**

Analysis of emotional and motivational activities in terms of the factors determining their occurrence. The significance of arousal, blood chemistry, sensory cues, past experience, social environment, etc. will be discussed.

Lectures : 3 hours per week for two terms.

Text : To be announced.

### **365 Systematic Psychology. Full Course. V. Maheux**

Covering Schools of Psychology : Structuralism, Functionalism, Behaviorism, Gestalt Psychology, Psychoanalysis and a survey of contemporary learning theories, e.g. Guthrie, Tolman, Hull and Skinner.

Lectures : 3 hours per week for two terms.

Text : To be announced.



**sociology**

J. Kane Visiting Professor

### **101 An Introduction to Sociology and Social Problems. Full Course. J. Kane**

A survey of the basic concepts and theories of sociology as well as an analysis of selected social problems including population, minorities, alcoholism, drug addiction, crime and delinquency, suicide and others.

Lectures : 3 hours per week for two terms.

Text : Kane, *Social Problems : A Situational-Value Approach*, Prentice Hall; Vanderzanden, *Sociology*; Ronald : McDonagh & Simpson : *Social Problems : Persistent Challengers*, Holt, Rinehart & Winston.

**201 Introduction to Social Psychology. Full Course.**

J. Tascone

A survey of the basic principles of social psychology including an analysis of motives, attitude values, perception and the interaction of individuals and groups.

Lectures : 3 hours per week for two terms.

Text : Lindesmith and Strauss : *Social Psychology*.

**301 Methods of Research. Full Course.**

J. Tascone

A survey of common research methods employed in sociology such as questionnaires, schedules, content analysis, participant observation, etc. Half of the course will be devoted to basic statistics and the application of them in field research. A term paper based on field research is required.

Prerequisites : Sociology 101 or 102. Limited to Majors in Sociology.

Lectures : 3 hours per week for two terms, and one hour a week laboratory.

**302 The Family and Other Social Institutions.**

J. Kane

A sociological and social psychological analysis of marriage, the family, covering dating, courtship, marriage prediction scales, institutions such as education and religion.

Lectures : 3 hours per week for two terms.

**theology**

Rev. C. H. Henkey Associate Professor (Chairman)  
 Rev. E. O'Brien, S.J. Professor (Director CTI)  
 Rev. W. Bedard, O.F.M. Assistant Professor  
 Rev. G. O'Brien, S.J. Assistant Professor  
 Rev. W. Browne, S.J. Assistant Professor  
 A. Webster Assistant Professor  
 R. Barberis Lecturer  
 J. Collins Lecturer  
 A. C. Dechene, Jr. Lecturer  
 P. Garnet Lecturer  
 F. Sawyer Lecturer  
 M. Spicer Lecturer

**Courses leading to the Honours B.A. in Theology.**

FIRST YEAR	SECOND YEAR	THIRD YEAR	FOURTH YEAR
Classics 102 or 111 or 112 or 121	Classics 112 or 202 or 212 or 221	Philosophy Social Science THEOLOGY	Philosophy THEOLOGY
English 101	French	Electives (3)	Electives (3)
French	Philosophy		
History 101	THEOLOGY		
Mathematics 101 or Science 101	Electives (3)		
THEOLOGY 101			

**Courses leading to a B.A. with the Major in Theology.**

FIRST YEAR	SECOND YEAR	THIRD YEAR	FOURTH YEAR
The same as in the Honours Theology programme.	Classics 112 or 202 or 212 or 221 English French Philosophy THEOLOGY	Philosophy Social Science Electives (2) THEOLOGY Electives (2)	Philosophy Philosophy Social Science THEOLOGY Electives (2)

**RELIGIOUS STUDIES (Courses offered to non-Roman Catholic students).****115 Reason and Religion. Full Course.**

P. Garnet

A survey of representative approaches, past and present, to personal immortality, the authentic nature of religion and problems of the knowledge of God, of the existence of evil, of the relationship of science and religion.

Lectures : 2 hours per week for two terms.

Text : Abernethy and Langford, *Philosophy of Religion* (Macmillan).

Further Readings : Plato, *Phaedo* (Lib.), Lucretius, *Nature of the Universe* (Penguin), Kierkegaard, *Fear and Trembling* (Anchor), Heim, *Christian Faith and Natural Science* (Harper), Teilhard de Chardin, *The Phenomenon of Man* (Harper), Lewis, *Miracles, The Problem of Pain* (Macmillan), J.B. Phillips, *Your God is too small* (Macmillan).

**215a Introduction to the Old Testament.**

P. Garnet

Historical background and literary analysis.

Lectures : 2 hours per week for two terms.

Texts : *The Oxford Annotated Bible R.S.V.* (O.U.P.). Anderson, *Understanding the Old Testament* (Prentice-Hall).

Further Readings : To be announced.

**215b Introduction to the New Testament.**

P. Garnet

Historical background and literary analysis.

Lectures : 2 hours per week for two terms.

Texts : *The Oxford Annotated Bible R.S.V.* (O.U.P.). Henshaw, *New Testament Literature* (Hodder & Stoughton).

Further Readings : To be announced.

**315 Comparative Religion. Full Course.**

G. O'Brien

A consideration of the basic religious attitudes and postures of primitive man and of the nature and role of religion in his life. An attempt will be made to assess the contribution of the religion of primitive man to the religions of the Ancient Near East and classical Greece and Rome.

Lectures : 2 hours per week for two terms.

Texts : Eliade, *Patterns in Comparative Religion* (Meridian), Eliade, *The Sacred and the Profane*, (Torchbook), Eliade, *Cosmos and History*, (Torchbook), Bousquet, *Sacred Books of the World*, (Pelican).

Further Readings : James, *The Ancient Gods* (Weidenfeld & Nicolson), Frankfort, *Kingship and the Gods* (Univ. of Chicago)

Hook, ed., *Myth Ritual and Kingship* (Oxford); James, *Sacrifice and Sacrament*, (Thames & Hudson); James, *The Cult of the Mother Goddess* (Thames & Hudson) and others to be announced... Radin, *Primitive Religion* (Dover), Radin, *Primitive Man as Philosopher* (Dover).

#### **THEOLOGICAL STUDIES (Courses limited to Roman Catholic students).**

##### **SYSTEMATIC COURSES.**

###### **101 Introduction to Theology. Full Course.**

Staff

The nature and function of Christian theology and the areas to which it traditionally addresses itself.

Lectures : 2 hours per week for two terms.

Texts : Davis, *The Study of Theology*, (Sheed & Ward); *The Christ of Faith*, Karl Adam, (Mentor Omega); Jones, *Unless Some Man Show Me*, (Stagbooks); MacKenzie, S.J., *Introduction to the New Testament* (Liturical Press). Liége, O.P. *What in Christian Life*, (Deus-Century). *The Oxford Annotated Bible with Apocrypha* (Oxford).

###### **206 The Reality of God. Full Course.**

W. Bedard

Certain images of God are being criticized or rejected as remote from a scientific age, or an urbanized society, or an anguished world. "God is dead". Correspondingly, there is a new interest in "the compassionate Christ". The course will evaluate these trends in the light of God's self-revelation that culminated in Christ. The current "ecclesiastical newspeak and theology in timestyle" will be sifted for valid theological insights.

Lectures : 2 hours per week for two terms.

Texts : Murray, *The Problem of God* (Yale Paperbacks); Gleason, *The Search For God* (Sheed & Ward); Barroso, *The Biblical Record of God's Self-Revelation* (Notre Dame Paperbacks); Urs von Balthasar, *Science, Religion and Christianity* (Burns & Oates Paperbacks); Abbot (ed.) *The Documents of Vatican II* (Guild Press); *The Oxford Annotated Bible with Apocrypha* (Oxford).

Further Readings : Mascall, *The Secularization of Christianity: The Reductionist Christianity represented by Van Buren and Robinson* (Darton); De Lubac, "Nietzsche and the 'Death of God', "The Drama of Atheistic Humanism" (Meridian Paperbacks); Liége, "Graven Images and the True God", *What is Christian Life?* (Deus Paperbacks); Daniélo, *God and the Ways of Knowing* (Meridian); Baum (ed.) *Pope Paul's Encyclical Ecclesiam suam* (Paulist Press); Detweiler, "Christ and the Christ Figure in American Fiction", *New Theology No. 2* (Macmillan Paperbacks); Cerfaux, *Christ in the Theology of St. Paul* (Herder & Herder); selected periodical literature.

###### **207 Second Council of Vatican. Full Course.**

C. H. Henkey

A study of the theological essence of councils and their meaning in the structure of the Church in the light of the theological and practical problems discussed and decided upon by the present Council. The meaning and need of reforms and development in the historical existence of the Church.

Lectures : 2 hours per week for two terms.

Texts : Jedin, *Ecumenical Councils of the Catholic Church* (Deus), Küng, *Structures of the Church* (Nelson), Abbot (ed.) *The Documents of Vatican II*, (Guild Press).

Further Readings : Congar, *Vraie et fausse réforme dans l'Eglise*, 1964 edition (Cerf).

###### **309 Theological Ethics. Full Course.**

A. C. Dechene, Jr.

A study of the ethical meaning of Christian dogma today.

Topics : biblical ethics; the grounds for reforming and rendering relevant Christian moral teaching today; signal moral issues today.

Lectures : 2 hours per week for two terms.

Texts : *The Oxford Bible*; Bright, *The Kingdom of God* (Abingdon); Fromm, *Man for Himself*; Heschel, *Who is Man?* (Stanford); Niebuhr, *Moral Man and Immoral Society* (Scribners).

###### **310 Contemporary Approaches to Christian Ethics. Full Course.**

A. C. Dechene, Jr.

A study of several important contemporary authors, including : Niebuhr, Lehmann, Thielecke, Häring, Lepp, Bonhoeffer, Tillich, and Robinson. (A more specialized course than Theol. 309, more written work will be expected of the students).

Lectures : 2 hours per week for two terms.

Texts : *The Oxford Bible*; Schnackenburg, *The Moral Teaching of the New Testament* (Palm).

###### **315 Comparative Religion. Full Course.**

G. O'Brien

A consideration of the basic religious attitudes and postures of primitive man and of the nature and role of religion in his life. An attempt will be made to assess the contribution of the religion of primitive man to religions of the Ancient Near East and classical Greece and Rome.

Lectures : 2 hours per week for two terms.

Texts : Eliade, *Patterns in Comparative Religion* (Meridian); Eliade, *The Sacred and the Profane*, (Torchbook); Eliade, *Cosmos and History*, (Torchbook); Bousquet, *Sacred Books of the World*, (Pelican).

Further Readings : James, *The Ancient Gods* (Weidenfeld & Nicolson); Frankfort, *Kingship and the Gods* (Univ. of Chicago); Hook, ed., *Myth Ritual and Kingship* (Oxford); James, *Sacrifice and Sacrament*, (Thames & Hudson); James, *The Cult of the Mother Goddess* (Thames & Hudson), and others to be announced... Radin, *Primitive Religion*, (Dover); Radin, *Primitive Man as Philosopher*, (Dover).

#### **LITURGICAL & PASTORAL THEOLOGY**

###### **250 Theology of Sacraments. Full Course.**

F. Sawyer

God's salvific Plan, as revealed to us in the Incarnation and Creation, has a two-fold aspect; spiritual and cosmic. Our task will be to investigate primarily the cosmic aspect of our Christian existence, i.e., sacramentals beginning with the Old Testament and following up the development of sacramentals in the life of the Church.

Lectures : 2 hours per week for two terms.

Text : Mortimart, *The Signs of the New Covenant*, (Liturgical Press);

Further Readings : Rahner, *The Church and the Sacraments*, (Herder & Herder); Danielou, *The Bible and the Liturgy*, (Notre Dame); Ellard, *Christian Life and Worship*, (Bruce); Vagaggani, *Theological Dimension of the Liturgy*, Journet, *The Meaning of Grace*, (Kenedy); Thils, *Christian Holiness*, (Lannoo); Michel, D.T.C. XIV, pp. 465-482, *Practical Handbook of Rites, Blessings and Prayers*, (North Central).

**255 Theology of the Parish Community. Full Course.**

W. Browne, S.J.

The Church in the Secular City demands radical re-thinking of the structure and function of the parish. There will be a study of the historical development of the parish, and an attempt to see the parish from the point of view of Canon Law, theology, liturgy and sociology. In the light of this study, ideas for the future of the parish can be more scientifically examined.

Lectures : 2 hours per week for two terms.

Text : Blochlinger, *The Modern Parish Community*, (Chapman).

Further Readings : Davis and others, *The Parish in the Modern World*, (Stagbooks); Lee, *The Church and the Exploding Metropolis*, (John Knox Press); Floristan, *The Parish — Eucharistic Community*, (Fides).

**260 Liturgical Year.**

J. Collins

A theological and practical introduction into the life of worship of the Church as it unfolds in the liturgical year with its focus on the Paschal Mystery based strongly on the Constitution of the Sacred Liturgy (Vat. II). In the first term the Advent-Christmas-Epiphanies circle will be presented, in the second, Lent-Holy Week-Resurrection-Ascension concluding with a discussion on the cult of the saints as it fits into the Mystery of Christ.

Lectures : 2 hours per week for two terms.

Texts : *Roman Missal*, Davis, *Liturgy & Doctrine* (Stagbook); Rahner, *The Eternal Year* (Palm); Abbott ed., *The Documents of Vatican II* (Guild Press); Roguet, *Season of Hope : Advent, Christmas, Epiphany* (Liturgical Press).

Further Readings : Maertens-Frisque, *Guide for the Christian Assembly*, (Biblica); Storey, ed., *Days of the Lord*, 3 vols. (Herder & Herder); Bouyer, *Liturgical Piety* (Notre Dame); Bouyer, *Rite and Man*, (Notre Dame); Maertens, *Bible Themes* (Biblica).

**SCRIPTURE COURSES****220 Biblical Theology. Full Course.**

A. J. Webster

The Nature of Faith in the Old and New Testaments. A study of the act of faith from the obedient faith of Abraham to the Pauline faith working in charity, man's response to divine revelation offering him the gift of divine adoption.

Lectures : 2 hours per week for two terms.

Texts : *The Oxford Annotated Bible with Apocrypha, RSV*. (Oxford) Heaney, ed., *Faith, Reason and the Gospels*, (Newman); Joly, *What is Faith?* (Hawthorne).

Further Readings : D'Arcy, *The Nature of Belief*, (Longmans); Cristiani, *Why We Believe*, (Hawthorne), other selections to be announced.

**320 The Covenant and Its Fulfilment. Full Course.**

W. Bedard

The Covenant of Sinai, constantly broken and constantly renewed, finding its fulfilment in Christ and in his members, the true People of God. Christian life as a covenant relationship. The Church's sacraments and the Covenant. Jewish and Protestant thought on the Covenant.

Lectures : 2 hours per week for two terms.

Texts : *The Oxford Annotated Bible with Apocrypha* (Oxford); Tos, *Approaches to the Bible : Old Testament*, (Prentice-Hall); Mackenzie, *Faith and History in the Old Testament* (Macmillan); Oesterreicher, *The Israel of God* (Prentice-Hall); *Vatican Council II, Constitution on the Church* (St. Paul).

Further Readings : Rahner et al, *The Word: Readings in Theology* (Kenedy); Eichrodt, *Theology of the Old Testament*, Vol. I (Westminster); Gelin, *Key Concepts of the Old Testament* (Deus); Giblet, *The God of Christians, the God of Israel* (Desclée); Urs von Balthasar, *Martin Buber and Christianity*, (Macmillan); Tavard, *Understanding Protestantism* (Deus-Century); selected periodical literature.

**324 Theology of Prayer in the Psalms. Full Course.**

W. Browne

A study of the historical setting, structure, and significance of the Psalms for those of the Jewish-Christian tradition, with special emphasis on the Passover and Paschal Mystery.

Lectures : 2 hours per week, for two terms.

Text : George, *Praying the Psalms*, (Fides).

Further Readings : Lewis, *Reflections on the Psalms*, (Fontana); Weiser, *The Psalms*, (Westminster); Ellis, *The Men and Message of the Old Testament*, (Liturgical Press); Ryan, *Key to the Psalms*, (Fides).

**HISTORICAL COURSES****333 Development of Christian Thought Full Course.**

G. O'Brien

The focal point will be the emerging concept of the Church, departing from Vatican II, considering the urge to be contemporary and the need to be traditional — the drama of the declaration of Papal Infallibility in the century of Liberalism and Nationalism, her distrust of modern democratic liberties in the emerging secular state, the rise of Protestantism, tolerance and freedom in a changing world, the dissolution of the basic medieval concepts, the great Schism and the contribution of the early general councils.

Lectures : 2 hours per week for two terms.

Texts : Burns (ed.) *Mission and Witness*, (Newman); *Documents of Vatican II*, (Palm); *The Church : Readings in Theology* (Kenedy); Butterfield, *Christianity & History*, (Fontana).

Further Readings : Murray, *The Problem of God*, (Yale); Rahner, *The Dynamic Element in the Church*, (Palm); Hazard, *European Thought in the Eighteenth Century*, (Meridian); Butler, *The Idea of the Church*, (Helicon); Hastings, *One and Apostolic*, (Darton); Küng, *Structures of the Church*, (Nelson); Mirgeler, *Mutations in Western Christianity*, (Palm); and others to be announced.

**335 Patrology. Full Course.**

F. Sawyer

A study of the Fathers and Ecclesiastical Writers of the early Church with selected readings from their works illustrative of their significance as witnesses to the doctrines of Christianity.

Lectures : 2 hours per week for two terms.

Texts : Dirksen, *Elementary Patrology* (B. Herder), (for Honours students); Altaner, *Patrology* (Herder & Herder); Sr. Mary Peter, (ed.), *Readings in Patrology* (Loyola).

Further Readings : Daniélou-Marrou, *The First Six Hundred Years* (McGraw-Hill), Kelly, *Early Christian Doctrines*, (Harper), selected readings from *Ante-Nicene, Nicene and Post-Nicene Fathers* (Eerdmans).

**340 Theology of History. Full Course.** M. Spicer

Mindful of mature nineteenth century criticism of Christianity by Kierkegaard and Nietzsche, we will explore a theology of history in which Christ, the God-Man in Time is a central symbol inciting thought. Karl Rahner says of God's Word, "His Word and Act are free in the further sense that they are freely directed to men already in existence, and so are essentially Event and History, not Thing, metaphysical Idea or Norm. What happens in saving history is not the natural outcome of some unchanging ideal law, but the free, incalculable, ever new Event of God's activity.

Lectures : 2 hours per week for two terms.

Texts : Balthasar, *A Theology of History*, (Sheed & Ward); Cullmann, *Christ and Time*, (SCM); Eliade, *Cosmos and History*, (Harper); Rust, *Towards a Theological Understanding of History*, (Oxford).

Further Readings : Berdyaev, *The Meaning of History*, (Meridian); Bultmann, *History and Eschatology*, (Harper); Casserley, *Towards a Theology of History*, (Mowbray); Chifflet, *Approches d'Une Théologie de l'Histoire*, (Esprit); Collingwood, *The Idea of History*, (Oxford); D'Arcy, *The Meaning and Matter of History*, (Meridian); Lowith, *Meaning in History*, (Univ. of Chicago); Marrou, *De La Connaissance Historique*, (Esprit); Meyerhoff, *The Philosophy of History in Our Time*, (Anchor); Ricoeur, *Histoire et Vérité*, (Seuil).

**AUTHOR COURSE**

**208 Newman : Contents and Analysis of Faith. Full Course.**

A. J. Webster

A study of Newman's contribution to the analysis of the act of faith in terms of a personalistic philosophy which is even more pertinent today in the light of the emphasis by Vatican II on the personal aspects of faith.

Lectures : 2 hours per week for two terms.

Texts : Newman, *Grammar of Assent*, (Image); Newman, *Apologetics*, (Houghton); Flanagan, *Newman, Faith and the Believer*, (Newman Press); Guardini, *The Life of Faith*, (Newman Press).

Further Readings : Selections on faith will be chosen.

**348 Teilhard de Chardin. Full Course.** C. H. Henkey

The objections of contemporary materialism to the Christian world-view and existence could not formerly be answered by the correct but one-sided insistence on the priority and importance of spiritual (eschatological) and moral values. The real answer consists in the theological penetration and integration of the evolutionary and historical dimensions of existence. Teilhard de Chardin's genius was the first to achieve such integration by the ordering into one line of ascending evolution towards the point Omega of matter-life reason and love.

The purpose of our study is to translate the insights of Teilhard's prophetic and poetic vision into the more objective language of systematic theology.

Lectures : 2 hours per week for two terms.

Texts : *The Future of Man* (Harper); *The Milieu Divin* (Fontana); *The Phenomenon of Man* (Harper).

Further Readings : Crespy, *La pensée théologique de Teilhard de Chardin*, (Presses Universitaires), Cuénot, *Teilhard de Chardin* (Helicon); de Lubac, *La pensée religieuse du Père Teilhard de Chardin* (Aubier); Wildiers, *Teilhard de Chardin* (Presses Universitaires).

**350 Kierkegaard and Paradox. Full Course.** M. Spicer

The course is meant to be an introduction to the literature of Kierkegaard covering the range of his aesthetic, ethical, and religious writings. We ought to discover somewhat the Kierkegaard behind the authorship and with an eye for interpretation see in this Kierkegaard a literary artist, an exacting philosopher and a most significant theologian who is more rational than he is traditionally considered to be. The course will explore some controversial interpretations of this difficult though intensely inspiring theologian. We will have to ask ourselves what does the Paradox, the God-Man in Time entail for Kierkegaard.

Lectures : 2 hours per week for two terms.

Texts : *The point of View for My Work as an Author*, (Harper); *The Present Age*, (Harper); *Either/Or*, Vol. I, Vol. II, (Doubleday); *Fear and Trembling, Sickness Unto Death*, (Doubleday); *Philosophical Fragments*, (Princeton); *The Gospel of Our Sufferings*, (Eerdsman).

Further Readings : Collins, *The Mind of Kierkegaard*, (Gate); Dupre, *Kierkegaard as Theologian*, (Sheed & Ward); Geismar, *Lectures on the Religious Thought of Kierkegaard*, (Augsburg); Lowrie, *A Short Life of Kierkegaard*, (Doubleday); McKinnon, *Kierkegaard, cf. Architects of Modern Thought*, (CBC); Swenson, *Something About Kierkegaard*, (Augsburg).

**355 Theological Impact in Bernanos. Full Course.**

R. Barberis

"The Church and modern world need laymen like Bernanos who will have the courage and strength of being prophets of the Gospel". (Cardinal Léger). As a novelist, Bernanos presents a personal view of Christian life and its answers to modern anguish; as a polemicist, he adopts a firm position on the main problems of our time: the atomic bomb, war, poverty, mechanization, etc. The course will lead to an understanding of the theological implications in the thought of a great French Catholic author.

Lectures : 2 hours per week for two terms.

Texts : *The Diary of a Country Priest*, (Fontana); *The Carmelites*, (Fontana); *Under the Sun of Satan*. Notes to be published.

Further Readings : The Works of Bernanos (in French); Hans Urs von Balthasar, *Le chrétien Bernanos* (Seuil); Charles Moeller, *Littérature du XXe siècle et christianisme T. 1* (Casterman); Béguin, *Bernanos par lui-même* (Seuil).

**ADVANCED STUDIES**

**410 Colloquium**

Staff

Individual directed research for Honours and advanced students. (Clearance by respective chairman and acceptance by professor mandatory).

Major Themes :

- Comparative Ethics (A. C. Dechene, Jr.)
- Comparative Religion and Ecclesiology (G. O'Brien, S.J.)
- Biblical Theology (A. J. Webster)
- Johannine and Pauline theologies (Fr. W. Bedard)
- K. Rahner & Teilhard de Chardin (C. H. Henkey)
- Liturgical & Pastoral Theology (W. Browne, S.J.).



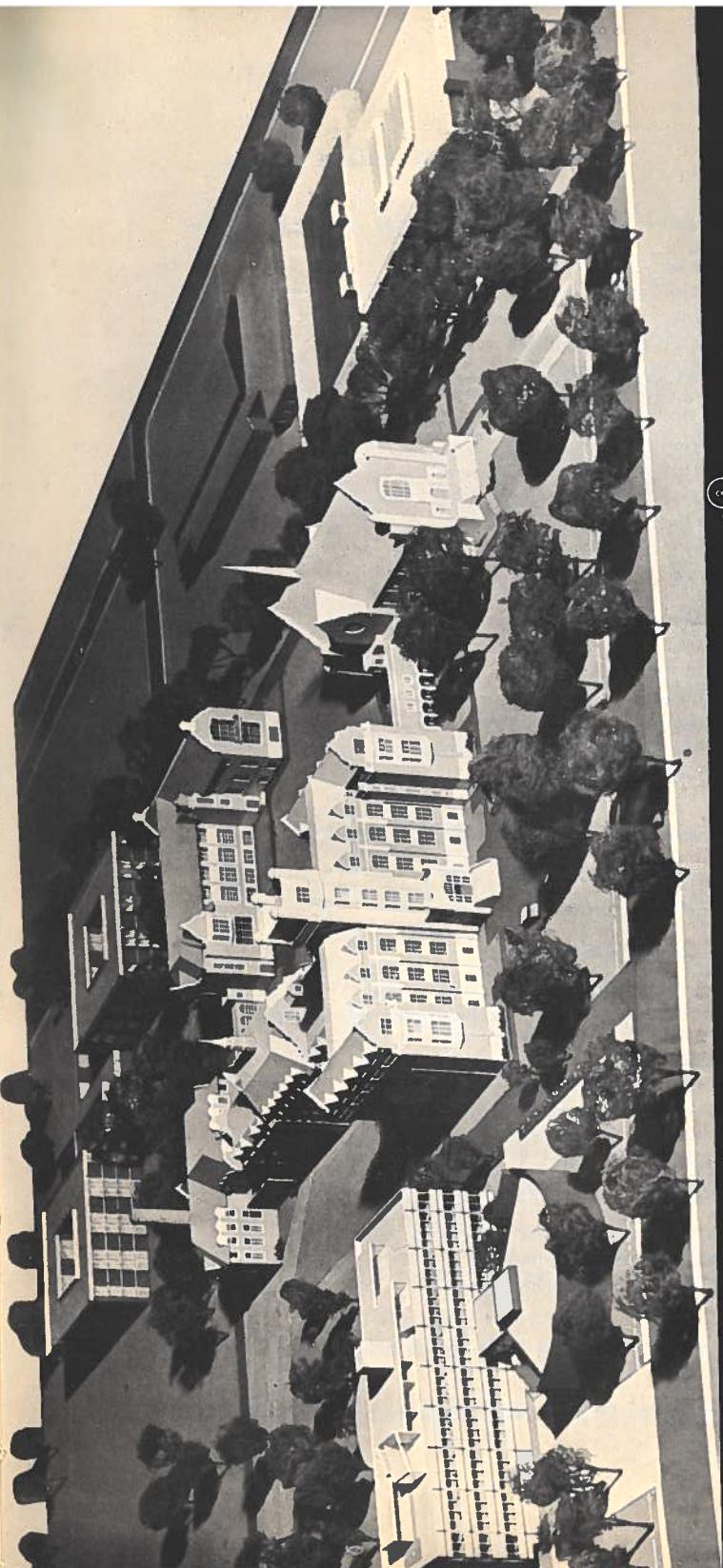
PHYSICS LABORATORY



ELECTRONICS LABORATORY



COMPUTING CENTRE



- 1 Administration Building • 2 Chapel • 3 Central Building
- 4 Drummond Science Auditorium • 5 Science Building • 6 Science Library
- 7 Refectory Building • 8 Hingston Hall (Residence) • 9 Stadium
- 10 Georges P. Vanier Library • 11 Junior Building

Not shown on photo of campus model: New High School, Students Union, Faculty Residence, Engineering Building, Athletic Centre.



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- 97 Major in Classics
- 100 Major in Communication Arts
- 102 Major in Economics
- 116 Major in English
- 122 Major in French
- 132 Major in History
- 143 Major in Philosophy
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- 122 Honours in French
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